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ABSTRACT

This practicum was designed to reduce student apathy toward learning through the presentation of workshops and the conducting of collegial networking sessions in an effort to give teachers a broad base of strategies and interdisciplinary approaches that were intrinsically motivating to students. Four training workshops were designed and implemented; 10 collegial networking sessions were planned and conducted; all participating students and teachers were surveyed before and after practicum implementation; data were collected on student behavior, achievement, and teacher strategy use; and three booklets of strategies for participating teachers were developed and distributed. Analysis of student grades, teacher checklists, and student questionnaires indicated that the workshops and strategies did not seem to produce an immediate improvement in students' attitudes toward academic tasks. However, incidents of referrals and suspensions of participating students showed a favorable decline, tentatively suggesting a degree of positive change. Unexpected outcomes of increased collegial cohesion, professional confidence, and the creation of two informal teaching alliances based upon the tenets of this practicum offered a strong base for the long-term implementation of a more intrinsically motivating approach to teaching and learning at this school. (Two figures and eight tables of data are included. Appendixes contain school goals, lesson outline, strategies, checklist, response matrix, student questionnaire, flier, handouts, and closing interview form.) (Author/SR)

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Replacing Academic Apathy with the Joy of Learning through an Intrinsic, Integrated Language Approach for Middle School Students

by

Madeleine Friedman

Cluster 38

A Practicum II Report presented to the Ed. D. Program in Child and Youth Studies in Partial Fulfillment of the Requirements for the Degree of Doctor of Education

NOVA UNIVERSITY

1993

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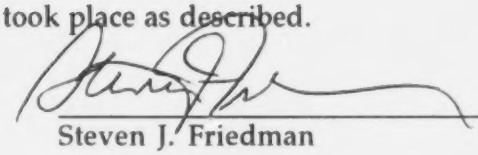
Verifier: 

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This practicum report was submitted by Madeleine Friedman under the direction of the adviser listed below. It was submitted to the Ed. D. Program in Child and Youth Studies and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova University.

Approved:

March 6, 1993 — Date of Final Approval of Report

Wm. W. Anderson — Dr. William Anderson, Adviser

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ABSTRACT

Replacing Academic Apathy With the Joy of Learning Through an Intrinsic, Integrated Language Approach for Middle School Students. Friedman, Madeleine, 1993: Practicum Report, Nova University, Ed. D. Program in Child and Youth Studies. Apathy/Educational Attitudes/Educational Practices/Holistic Approach/Interdisciplinary Approach/Integrated Curriculum/Middle Schools/Whole Language Approach

This practicum was designed to reduce student apathy toward learning through the presentation of workshops and the conducting of collegial networking sessions in an effort to give teachers a broad base of strategies and interdisciplinary approaches that were intrinsically motivating to students.

The writer designed and implemented four training workshops; planned and conducted 10 collegial networking sessions; surveyed all participating students and teachers before and after practicum implementation; conducted ongoing data collection on student behavior, achievement, and teacher strategy use; and developed and distributed three booklets of strategies for participating teachers.

An analysis of student grades, teacher checklists, and student questionnaires indicated that the workshops and strategies did not seem to produce an immediate improvement in students' attitudes toward academic tasks. However, incidents of referrals and suspensions of participating students did show a favorable decline, tentatively suggesting that the efforts of the teachers were beginning to effect a degree of positive change. Unexpected outcomes of increased collegial cohesion, professional confidence, and the creation of two informal teaching alliances based upon the tenets of this practicum offered a strong base for the long-term implementation of a more intrinsically-motivating approach to teaching and learning at the writer's school.

* * * * * * * *

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CHAPTER I

INTRODUCTION

Description of Work Setting and Community

Work Setting

The writer works in one of 30 middle schools in a large, county-based school system. Districtwide, the total population as reported in the 1990 census is 1,255,488. Of this number, over 170,000 students are enrolled in public education programs from pre-kindergarten through twelfth grade.

There are a total of just under 1600 sixth, seventh, and eighth graders in the writer's school. Because the writer's school is the designated research and development middle school for her district, the facility is not a neighborhood school, but draws its population from the entire county in proportion to the ethnic balance of the district. Currently, 64 percent of the students are white, 21 percent are black, 8 percent are Hispanic, and 7 percent are of Asian descent. Approximately half the students in the school are male, and half are female.

Two distinct groups of students are housed in the writer's school: those who speak English and those with little or no English language proficiency. The parents of English-speaking students are required to place their children on a waiting list for entrance into the writer's school. Some students are chosen from that waiting list between kindergarten and grade five, entering the writer's school through one of its two feeder elementary schools. The remainder of the English-speaking student population is chosen

from the waiting list prior to their entry into sixth grade, with the selection reflecting the need for ethnic as well as gender balance.

Students with little or no knowledge of the English language -- the multicultural students -- are assigned to the writer's school based upon their native language. The school accepts students throughout the district who speak "exotic" languages, designated as any language other than Spanish or Creole. At present, 20 percent of the children in the school are multicultural students.

The writer's school is comprised of a total of 129 staff members holding the following positions: 80 classroom teachers, 4 administrators, 3 guidance counselors, 1 specialist in exceptional education, 1 middle school generalist, 5 paraprofessionals, 15 clerical personnel, 11 cafeteria workers, and 9 custodians. Many staff members are currently seeking advanced degrees. At present, 23 percent of the teachers have earned Master's degrees, 3 percent have earned the Educational Specialist degree, and 1 percent have earned a Doctorate.

The Community

Description and Demographics

Twenty-eight self-governing municipalities within the county, each of varying ethnic composition, are served by the writer's school. The municipalities range from pre-planned residential communities, to mid-sized towns, to moderately-populated urban subdivisions, all steadily growing in population density. A balance of upper, middle, and lower socioeconomic residents live within the community, and a large number of retirees intermingles with the working population.

A steady influx of residents from a growing diversity of cultures exerts an additional and ongoing impact on the changing ethnicity of the county.

Results of the 1990 Census reveal that more than 200,000 residents speak a primary language other than English. Spanish is the primary language of more than 94,000 residents. Figures released by the district in conjunction with the 1990-1991 middle school accreditation process through the Southern Association of Colleges and Schools (SACS) reflect a higher growth rate for the county's non-white population since 1980.

Community Resources

The county in which the writer's school is located features more than 250 governmental and non-profit private agencies and organizations that provide day care, counseling, and other essential social programs. One main library and 24 branches offer a variety of comprehensive services including programs for the deaf, literacy programs, large print collections, and foreign language collections. Thirty regional and community parks offer an extensive choice of recreational diversions, and cultural facilities include an art museum, a planetarium, a hands-on science discovery center, and several centers for the performing arts. Opportunities for higher education within the county include four universities, a four-year business college, one community college, a private two-year business college, and an institute for the visual arts.

Writer's Work Setting and Role

The underlying philosophical and political tenor of the writer's work setting has been influenced by three ongoing research and development projects. One effort, the Coalition of Essential Schools, was originally assigned to the writer's school by the former superintendent of the writer's district. The second project, "shared decision-making," was chosen for school-wide implementation by over 90 percent of the faculty. The third

project, School Improvement, is the district's response to a statewide mandate for greater school-based accountability for student achievement. Whether mandated or chosen, each endeavor has exerted a major influence on the writer's school environment.

The Coalition of Essential Schools

For over six years, the writer's school has been an Associate Member of the Coalition of Essential Schools, working in cooperation with Brown University in Providence, Rhode Island, to implement nine common principles as presented by Sizer (1985) in Horace's Compromise. First begun as an assigned research and development project for the district, the school's association with the coalition has been the impetus for innovative educational explorations by small groups of teachers at the writer's school. Although school-wide implementation has been hindered by both spirited and subtle resistance, a common phenomenon of early forays into coalition ideals (Toch & Cooper, 1990), the dream has recently become revitalized as nearly 30 faculty members have been meeting on a monthly basis to engage in a study of Sizer's nine principles, and as 10 additional faculty members have expressed an interest in becoming more familiar with coalition ideals even though time constraints preclude their attendance at the monthly coalition meetings.

An overview of Sizer's (1985) nine principles is necessary for the reader to gain a sense of the educational context now under exploration by almost half the faculty. The nine common principles of the Coalition of Essential Schools offer a framework, but no formula, for school restructuring. The principles are not endpoints to be attained, but rather constitute an overarching umbrella that asks and challenges educators to continuously

evaluate and evolve their practice over time. The individual principles described by Sizer are paraphrased below; the italicized portions represent Sizer's original phraseology and the crux of each principle as defined on pages 225 to 227 of Horace's Compromise:

1. Intellectual Focus - schools should expect all students to learn *to use their minds well.*

2. Simple Goals - the mere coverage of content should be replaced by the mastery of *a limited number of essential skills and areas of knowledge; less is more.*

3. Universal Goals - the goals of the school *should apply to all students;* it is the means to these ends that may vary with individual student needs.

4. Personalization - each teacher should not be responsible for more than 80 students, so that the teacher can get to know those students well; schools should not be forced to yield to mandates that demand a uniform curriculum or one best method for all.

5. Student-as-Worker/Teacher-as-Coach - students must not passively receive instruction from a *teacher as deliverer of instructional services;* rather, the students must learn how to learn, and the teacher must nurture an inner desire for lifelong learning by guiding, or facilitating, this learning.

6. Diploma (Mastery) by Exhibition - the *mastery of important things* should represent a rigorous reflection of what students are able to do; strict timetables for content coverage and accumulated hours of class time should not be the criteria for earning a diploma. Nor should mere paper and pencil tests masquerade as indicators of a student's real abilities.

7. Attitude - teachers must convey an attitude of *unanxious expectation* that all students are capable of reaching the mastery criteria set forth by the

exhibition; attitudes of *trust* and *decency* should also pervade throughout the school. Parents should be welcomed as *collaborators*, not excluded as intruders.

8. Staff - the roles of all staff members may need to be rethought; subject area demarcations should blur as teachers become *generalists* as well as experts in one domain.

9. Budget - the implementation of coalition principles should not increase the per pupil cost by more than 10 percent; schools must work within their individual fiscal allocations to enable restructuring to be viable and affordable. It may be necessary to redesign the traditional paradigms of school services to operate within this constraint.

To the writer, her school seems like Horace's School at the outset of Sizer's (1992) recent book of the same name. The "public relations talk" (p. 6) affirms the school's belief in the nine principles; but, to paraphrase Sizer, school practices, after more than six years, continue to challenge the rhetoric. Most teachers still teach at a student-teacher ratio of well over 80:1. Most subjects are still parceled out in 55-minute-long segments, and minimum basic skills checklists, with their emphasis on small, distinct pieces of content knowledge, continue to undermine the "knowledge-in-use" urged by Wiggins (1987, p. 6) when he worked with the writer's school as a consultant for the Coalition of Essential Schools. Scopes and sequences break courses into lists of topics to be covered, instead of ideas to be explored. The curriculum still reflects, in Sizer's (1992) words, "what the teachers will do, what 'things' the kids will be 'exposed' to [while] the students remain invisible, lumped in their age-graded cohorts ready to watch the teacher's parade of things" (p. 6). It is easy to voice one's agreement with Sizer's (1985)

principles; it is much more difficult to put the principles into practice (Toch & Cooper, 1990).

Shared Decision-Making

For almost three years, the writer's school has been actively involved with the district's shared decision-making (SDM) pilot project, an effort intended to boost student achievement and to promote teacher professionalism. By including administrators, teachers, parents, and students in a democratic approach to making school-based decisions, SDM is viewed as an opportunity for an increasing number of stakeholders to have a voice in the policies and practices adopted by the school.

However, an evaluation of SDM in the writer's school, conducted in the late fall of 1991 by an outside consultant (Bondy, 1991), pinpointed several areas still in need of further development, including the lack of a shared vision and the lack of communication between the school's SDM council and the faculty-at-large. As a consequence of that evaluation, the writer's school has sought to augment the interactive dialogue between the SDM council members and the general staff. The four goals adopted for the 1992-1993 school year reflect increased efforts by the SDM council to solicit faculty input before long-range decisions are made. (See Appendix A for a list of the school's chosen goals).

School Improvement

In response to the national goals reflected in America 2000 and the state's Blueprint 2000 efforts, the writer's district has developed its own list of eight School Improvement goals and has required each school to write its own set of site-based objectives that will become the standards for assessing each school's quality and performance for the 1993-94 school year. To this

end, the SDM council has evolved into a body called the School Improvement Team (SIT), and the Coalition of Essential Schools movement is being considered as a possible vehicle for the implementation of School Improvement at the writer's school site. The goals for 1993-94, currrently in the formative stage, will need to be finalized and approved before the close of the 1992-93 school year.

The Writer's Role and Responsibilities

The writer currently serves as the Middle School Generalist for her school, a role that evolved from the Middle School Coordinator's position held by the writer for the past three years. Prior to serving in this capacity, the writer worked for three years teaching language arts and reading as one of the school's pilot teachers for the Coalition of Essential Schools project. The writer has been in her district for 15 years and has taught computer literacy, computer programming, and a motivational curriculum as well as language arts and reading to sixth, seventh, and eighth graders.

As the Middle School Generalist, the writer does not formally teach students; rather, she is a "teacher-on-task," acting as a liaison between the teachers and administrators at her school and the district's Middle School Curriculum office. The writer's primary and overall function is to ensure the implementation of the middle school concept in its observable forms: teaming of teachers, common planning time, the writing and teaching of interdisciplinary units, affective education and advisory time, increased parental involvement, elementary and high school articulation, and the exploration of new forms of student assessment. The writer is also expected to be an active member of the School Improvement Team.

A brief history of the evolution of the middle school concept will help the reader to better grasp the implications of the writer's role. In the 1980's, great emphasis was placed on the physical, emotional, social, and intellectual development of children from 10 to 14 years of age, and it was felt that teachers who knew about these developmental phenomena would be better able to tailor their teaching and the curriculum to the students' needs (George & Lawrence, 1982). Recommended practices included the teaming of teachers and students (Carnegie Council on Adolescent Development, 1989; George & Lawrence; Merenbloom, 1986), the scheduling of an advisory period to increase a student's sense of importance and belonging (Carnegie Council on Adolescent Development; George & Lawrence), and the design and implementation of teacher-developed interdisciplinary units (George & Lawrence; Jacobs, 1989; Vars, 1987) as a means of integrating the curriculum.

Recently, however, the middle school concept has evolved into a much deeper ideal than its proponents originally anticipated in the 1980's. Beane (1990b) hinted at the disequilibrium to come when he suggested that skills traditionally taught as independent exercises and activities would be more effectively taught within the framework of "thematic units drawn from the intersecting concerns of youth and world issues" (p. 4) and that these themes should take precedence over simple subject area divisions. Beane (1990a) described his ideas in even greater detail in his book, A Middle School Curriculum: From Rhetoric to Reality.

Lounsbury (1991) has also taken the paradigm of the middle school curriculum of the 1980's to task, urging middle school professionals "to employ zero-based curriculum development in the mode of zero-based budgeting [because] we can no longer achieve success by simply making

further adjustments or refinements in the prevailing program" (p. 3). Lounsbury has decried the constraints of scope and sequence mandates, the division of the school day into periods, and state requirements that have kept teachers locked into an education system developed nearly one hundred years ago. He takes issue with the ever-lengthening addition of fragmented programs treated as panaceas designed to cure every ill that has ever afflicted middle school children. Lounsbury finally calls for a meaningful curriculum that "[involves] heart as well as mind, attitude as well as information, spirit as well as scholarship" (p. 5). Certainly, these recommendations transcend the mere blending of subject areas and the clustering of skill objectives that marked the predominant mode of interdisciplinary unit-planning of the previous decade.

Arnold (1991) questions the value of teaching curricula driven by obsessions with skills mastery and "testing mania" (p. 9). Toepfer (1992) stresses the need for thematic content and the dissolution of subject delineations in the middle school curriculum. Wraga (1992) urges the development of core curricula that are "problem-focused [and] interdisciplinary" (p. 19) and that relate to real issues in students' lives. George, Stevenson, Thomason, and Beane (1992) go so far as to "propose that a thematic approach . . . should be the whole curriculum and define the entire middle school program . . ." (p. 93). Finally, Capelluti and Brazee (1992) agree that a new type of middle school curriculum should move, once and for all, away from regarding interdisciplinary units "as curriculum way-stations . . . outside the real curriculum . . . a break from the usual routine" (p. 15).

As her school's Middle School Generalist, the writer feels it is important to reflect the current evolution of the middle school concept as she

works toward deepening its implementation. The writer also feels that the site-based objectives established by the School Improvement Team should ultimately correspond to the evolving shift in middle school philosophy. As the site-based spokesperson for middle school trends, the writer sees the need to continually champion current advancements in research and theory as they impact the teaching of the middle school child.

CHAPTER II

STUDY OF THE PROBLEM

Problem Description

The teachers at the writer's school were becoming increasingly concerned about a number of student behaviors that, taken as a whole, constituted a student body that reflected a negative attitude toward academics and the general school environment. Students were displaying growing apathy toward their studies and toward general intellectual pursuits, and they were exhibiting increased disrespect for peers, adults, and property. Teachers complained that the students had become overly-concerned with the extrinsic rewards of grades for academic performance and with privileges for good behavior.

The problem described above seemed directly opposed to what one might have expected, given the school's history of affiliation with the Coalition of Essential Schools, its endeavors to implement the middle school concept, and the teachers' growing empowerment through the vehicles of shared decision-making and school improvement. Despite hopes of making school an interesting and engaging place for students, the opposite appeared to be occurring, and the best intentions of both teachers and administrators seemed to have gone awry.

Background Information: A History of Obstacles

When the writer's school became an Associate Member of the Coalition of Essential Schools in 1986, great optimism burned in the hearts of the five original pilot teachers who worked in a "school-within-a-school"

context to implement Sizer's (1985) nine principles, especially *intellectual focus* and *student-as-worker/teacher-as-coach*. Ideally, "students-as-workers" (as opposed to "students-as-busyworkers") would be self-motivated to engage in learning tasks. These students would desire to learn and would enjoy putting forth the effort to achieve. They would not need to be prodded by their teachers, because they would prod themselves. Their work would be meaningful and authentic (Wiggins, 1987) -- not the busywork often assigned as skill drills, worksheets, or chapters to memorize for tests. With high hopes, the five pilot trailblazers embarked on the coalition project with 100 sixth grade students and their optimistic parents. There was no blueprint to follow other than Sizer's nine guiding principles.

Obstacles soon stood in the path of the trailblazers. When, at the end of the pilot year, the original five teachers were invited to move up to seventh grade with their students, only one of the teachers chose to do so. Secondary certification requirements intimidated three of the teachers, who were only certified to teach students through the sixth grade, and the possibility of securing waivers through SDM and School Improvement would not emerge until a few years later. A fourth teacher, for reasons of stress, chose not to remain in the spotlight.

Thematic work begun by the lone original trailblazer and her new team of three additional seventh grade teachers was abruptly thwarted by the demand that the district's minimum basic skills take precedence over the writing of thematic units. The need to schedule four distinct mathematics sections according to student ability, and to comply with a rigid elective schedule for the seventh grade students, made attempts at heterogeneous grouping an unfulfilled dream. Verbal admonitions from "spelling Nazis"

(Bradsher, 1990, p. 317), who felt it was their duty to scrutinize all subject areas, intimidated the four seventh grade pilot teachers into emphasizing work from the textbook. Collegial admonitions directed at the former pilot teachers kept extensive curricular restructuring at bay. The students were supposed to become the workers, but not at the expense of established certification regulations, minimum subject contact hours, minimum basic skills tests, or the coverage of mandated textbooks. Ultimately, except for a few maverick teachers who quietly ignored a number of restrictive edicts, school-wide efforts to make the students the workers, in Sizer's (1985) sense, proved benign and had little effect on the overall school culture or on the students and teachers within.

With the advent of the formal implementation of the middle school concept, it appeared that new life -- and support from the district and the state -- was to be breathed into several coalition principles, most notably *student-as-worker/teacher-as-coach, intellectual focus, attitude, personalization,* and *mastery by exhibition*. Teachers were urged, indeed required, to plan in an interdisciplinary fashion, to use new strategies like cooperative learning, to seek innovative assessment procedures, and to teach affective education. Yet the old curriculum mandates were not lifted, and so teachers tried to fit in the implementation of the middle school concept between the "important" and unrelenting coverage requirements of the general curriculum. Affective education was squeezed into a 30-minute period weekly, and one or two "interdisciplinary units" a year were added as short breaks from curriculum coverage. In general, the students were still given a mandated curriculum driven by state-adopted textbooks and lists of scopes, sequences, and skills. The teachers were still expected to test student progress using minimum basic

skills tests and standardized assessments. Culminating activities like food festivals or fieldtrips, designed as the end goals of interdisciplinary unit implementation, were hardly rigorous substitutes for the assessment of knowledge; mandated assessments still measured the students' academic gains. Thus, despite one's best efforts, nothing had actually changed. External enticements like field trips, assemblies, or parties were still used as incentives to encourage students to behave and to do the required work – work that was still described as dull and boring by this writer's colleagues. It was still difficult to engage students in learning material that the teachers regarded as uninteresting. When the teachers tried to create interdisciplinary units by focusing on skills, it led to "units" that were little more than cross-disciplinary clusters of skills, classified under a "thematic" title, and culminated by an activity that enabled both teachers and students to take a short break from the everyday routine. Standardized test scores remained high, but learning for the joy of it remained elusive, foreign, and virtually untapped.

When the writer's school joined the district's shared decision-making pilot project, a vehicle was created whereby restrictions and mandates could be formally waived at either the district or the state levels, in order to pave the way for more innovative teaching practices. However, after more than two years into the project, the writer's school had not yet requested one waiver; the communication difficulties described earlier (Bondy, 1991) contributed to this lag. Teachers repeatedly voiced their frustrated disdain for a skill-driven curriculum but did not formally ask that the skill mandates be lifted. They balked at standardized testing, but remained intimidated by the district's publishing of all school scores in a comparative chart each year. In

general, such problems in the writer's school generated much talk, but little formal action was taken on any major issue.

Former Solutions: Why They Did Not Work

To improve student behavior and academic performance, the writer's school adopted the practice of awarding students coupons for good deeds performed and/or for notable class achievements. An accumulation of such coupons earned students free ice cream, lunch with the principal, or a host of other choices. Teachers were offering coupons for turning in assignments early and for improved behavior in class. Students grew to expect that even good lunch behavior would result in the addition of more coupons to their collections. Once in full swing, the program became somewhat annoying to many teachers, since students often demanded that coupons be offered for the completion of academic tasks or for compliance with requests for acceptable conduct. Some students constantly offered to take out the trash or clean the blackboard – for the price of a coupon. The writer's school was stymied by token-like coupons that grew to become more important than the tasks performed for their acquisition, and a discipline committee formed in the spring of 1992 recommended that the coupon program be eliminated for the following school year.

Another "solution" that appeared to have met a dead end was the faculty's perception that academic apathy could be remedied by an increase in the threat of receiving bad grades or of losing coveted privileges. The general attitude seemed to be that if the stakes were high enough, the problem of academic apathy could be cured, and students would dutifully complete their work. Unfortunately, the teachers found that although students could be coerced into completing assignments in order to avoid negative

consequences, they could not be forced into liking or becoming interested in the subject matter.

A related misconception prevalent in the writer's school was that academic apathy could be motivated out of existence if enough stickers, special pencils, field trips, and parties could be dangled in front of the students. The unwanted and unexpected result was that the students did only what was necessary to attain their desired rewards. Ultimately, the surface behaviors of students "on task" belied their underlying motivation for living up to their teachers' expectations. Students often complied with teacher directives by doing only the minimum; they did not labor beyond the point at which the positive reward was obtained. Once again, students could be enticed into completing their assigned work, but they could not be externally motivated to care about what they were learning. The problem of academic apathy continued to persist.

Concise Statement of the Problem

Instead of being enthusiastic about learning, the students at the writer's school were apathetic about their studies, which resulted in poor academic performance, minimal effort, concurrent behavior problems, and a lack of inner motivation to achieve. The teachers at the writer's school were not able to present the required subject matter in a way that sparked intrinsic enthusiasm, engaged students, or led to increasingly positive attitudes toward school in general or toward classwork in particular.

Problem Documentation

Evidence of the problem was supported by behavior records, report card grades, and by both individual and group interviews.

Behavior Records

The total number of external suspensions jumped, in the writer's school, from 28 external suspensions for the first semester of the 1990-1991 school year to 51 external suspensions for the first semester of the 1991-1992 school year. The most prevalent student offense resulting in suspension in 1991-1992 was "serious misconduct," a general term for blatant and repeated disregard for school rules (27 percent of all suspensions). Other offenses included defiance of authority (23 percent of all suspensions) and fighting (18 percent of all suspensions). Serious disruptions in the form of assault and battery (9.5 percent), vandalism (7.1 percent), and profanity (7.1 percent) were also prominent causes of suspensions.

The writer conducted separate interviews with the assistant administrators at the sixth, seventh, and eighth grade levels to determine the major cause of teacher referrals to the administration during the 1991-1992 school year. At the sixth grade level, class disruption, disrespect, and fighting were the major causes of referrals. The seventh grade administrative assistant noted that the largest number of referrals were for class disruption and rudeness. At the eighth grade level, students were most likely to be referred because of tardiness and the cutting of classes.

Report Card Grades

The mean failure rate for the first semester of the 1991-1992 school year was 5.25 percent, with some teachers failing more than 19 percent of their students. Ten teachers failed more than 10 percent of their students. More than two thirds of the grades awarded to the students reflected less than top quality performance (below a 90 percent average), a curious phenomenon

when considering the fact that the writer's school ranked second in the middle schools of the district on national standardized tests.

An Interview With The Principal

An interview with the principal at the writer's school revealed that too many teachers still allowed checklists and scopes and sequences to take precedence over efforts to make learning interesting and enjoyable. Decrying the teachers' concerns about covering "the almighty curriculum," the principal was distressed that teachers did not seek out underlying causes when students failed, preferring to blame the students' lack of effort for the "deserved" poor grade. According to the writer's principal, concern for the surface coverage of separate skills also stole attention away from the feelings and interests of the students, who were faced with a bland and steady diet of those skills "given" to to the children to learn for the purpose of being tested on the material.

An Interview With The Guidance Director

Coming from a different perspective, the guidance director at the writer's school pointed out that there was a pervasive lack of student respect for teachers' authority. Students exhibited a blatant disregard for school rules, and it was becoming routine for rules to be tested by defiant students. The guidance director was also distressed by the tendency for students to "tell the teachers off." She added that students were reluctant to take responsibility for their homework and other assigned tasks.

Group Interviews With Teachers

In interviews with ten teams of teachers (40 teachers), a number of negative student attributes were reported and fell into three general categories: (a) lack of student discipline, (B) low motivation to do the

assigned work, and (c) focus on external rewards for good grades or behavior. In terms of student discipline, the teachers were distressed not only by student actions toward teachers, but also by the students' lack of regard for the feelings of their peers. Students were often observed laughing at each other, cursing, or calling each other names; such cruel acts greatly disturbed the teachers interviewed by this writer. The teachers were no less appalled by student acts of vandalism and by the negative and defiant comments often returned when teachers asked students to comply with rules or directives.

The problem of student disinterest in schoolwork was also directly evidenced by sloppy work habits and a general apathy toward academic tasks. Teachers complained that the students did not do their homework and that their pupils often had "no clue" as to what chapter or unit was being covered at the moment. Students told teachers that they "forgot" to study for a test, even when the students all had been observed writing down the assignment at least one week before, under the watchful eye of the teacher. Or the students appeared to consciously choose not to study, "hoping they would remember" the answers for the next test or quiz. Teachers complained that their students were taught how to study, but that the children did not choose to apply those abilities to their assignments; nor did the students seem to apply their knowledge of how to write a research paper to the task at hand. Moreover, cheating was reported as rampant. In short, the students were not applying themselves to their assignments; either they refused to put forth any effort, they performed at minimal levels, or they blamed others when lack of effort resulted in lower grades or in failure.

The teachers interviewed by this writer also spoke with disdain about the need for every activity to be awarded a grade. One teacher remarked that

if grades were not awarded, assignments would not be done. Another colleague lamented that grades were more important to the students than the facts the children were learning. Still others felt despair at the thought that they could not, in the words of one interviewee, "hold anything over [the students'] heads." There was general agreement that too much emphasis was being placed on external rewards, and that the students had to "get something" in order to be motivated to do their work or to behave in class. Yet it was also ironic, but interesting, that although the teachers interviewed generally disliked the use of external rewards, they nevertheless saw no way around the need to continue using them.

Causative Analysis

Suppression of Student Individuality

In his book on the challenges of educating young adolescents, Koepke (1989/1992) describes the experiences of a teacher who is having difficulty keeping the discipline of her sixth grade class under control. Koepke emphasizes that early adolescents undergo a period of budding individuality, and if a teacher ignores this natural surge of independence by insisting upon using methods that suppress the uniqueness of each child, the children will "react by expressing themselves as individuals in whatever ways remain open to them, and this will lead to all kinds of discipline problems" (p. 24).

The negative behaviors exhibited by students at the writer's school seemed to be a symptom of the way in which teachers perceived their roles. There was a curriculum to cover (the "almighty curriculum" lamented by the principal) which was delivered to the students primarily in the form of required skill checklists and textbook chapters designated for each grade level. This often cut-and-dried approach did not leave too much room for student

expressions of individuality, especially when standardized minimum basic skills tests and chapter quizzes comprised the bulk of teacher assessment practices. The writer suspected that this condition limited more productive avenues of individual expression that might otherwise have been open to students, leading to a rise in the discipline problems that annoyed both teachers and administrators.

In response to the prevalence of negative behaviors, elaborate systems of rewards and punishments were instituted in attempts to elicit conformity to school rules and to content area requirements. This appeared to exacerbate the problem stemming from the suppression of positive outlets for individual expression, as students operated in a state of ambivalence -- torn between their desire for rewards (and the avoidance of unpleasant consequences) and their desire to be recognized for their unique and special qualities.

Blocking Intrinsic Interests By Externally Motivating Students

Extrinsic reward practices like the coupon program in force at the writer's school actually stood in the way of the development of the students' intrinsic motivation. The teachers fervently voiced a desire for the students to control their own behaviors and to develop responsibility for the completion of assigned work. Yet student disinterest in a curiculum imposed upon them without regard for their distinct personhood, coupled with additional impositions of rules and authority, seemed to leave the teachers no choice but to dangle external rewards and threats in front of the children in the hopes of motivating the students to comply with curricular demands.

Deci and Ryan (1985) strongly caution against the use of extrinsic motivators to induce an intrinsic desire to learn, noting that such efforts are

counterproductive. Citing numerous studies involving token economies and the practice of doling out grades and other rewards for executing teacher-imposed behaviors, Deci and Ryan state that desired behaviors elicited in this manner are, at best, generally sustained only while the reward programs are in effect; when the rewards cease, so do the desired behaviors, since those behaviors have not become internalized and self-directed but are merely the product of conditioning. According to Deci (1984), repeated use of extrinsic rewards are known to cause people to actually "lose self-determination without even realizing it" (p. 6).

Rewards and Threats of Punishment Distorted Students' Focus

The teachers in the writer's school were surprised at the apparent lack of effort of even their "good" students. Yet, according to research conducted by Caine and Caine (1991), students could be coerced into completing assignments, even into earning A's, while still retaining an underlying attitude of disinterest in what they did. When students were threatened with low grades or the loss of privileges, stress (not a desire to learn) became the motivating factor, producing a phenomenon known as "downshifting" (Caine & Caine, p. 64). When a student downshifted, he or she reverted to predictable behaviors facilitating the avoidance of negative consequences; this outer behavior did not mean that the child necessarily enjoyed or wanted to perform the assigned task.

Superficial Student Behaviors Belied Their Feelings

Although apathy was an inner feeling, the teachers at the writer's school appeared to emphasize the external aspects of motivation without going beyond surface behaviors. Because it was expected that interested and internally-motivated students would behave in class and do their required

work on time, the teachers deemed such observable behaviors as sufficient indicators of the students' intrinsic interest in their schoolwork. Therefore, the teachers endeavored to externally entice students to behave and to hand in work, making the erroneous assumption "that student obedience [was equal to] student motivation" (Mc Caslin & Good, 1992, p. 11). However, the desired results, when they did occur, were short-lived, since the teachers did not attempt to transform initial positive behaviors into inner drives by switching to techniques of intrinsic motivation. Indeed, the writer suspected that few teachers knew what such intrinsic techniques might be.

The Absence of Joy in Learning

One department head confided to the writer that the curriculum she oversaw was boring. A second department head stated to her team that she viewed interdisciplinary units as a middle school obligation, not as an imperative. Still other teachers at the writer's school, by their own admission, continued to reserve innovative, creative, and "enjoyable" activities for Fridays or for other special days, regarding such activities as separate from the "regular" curriculum of chapters, worksheets, and skill tests.

In contrast to the view of the "regular" curriculum as boring and obligatory, Bodemuller (1990) has recognized the need for teachers to feel joy and wonder about their subject matter; otherwise, the content alone might not be exciting or motivating for the child. Bodemuller has further asserted that peppering up a boring curriculum with occasional "fun" activities is not enough to sustain the momentum of interest and excitement such brief interludes might generate. According to Bodemuller, maintaining the momentum of joy and engagement throughout the school year is essential,

with only occasional insertions of content that might be deemed uninteresting to the child. If the momentum is lost, the children's interest can wane. Sadly, whatever momentum of student engagement might have been initiated during occasional breaks in the chapter/worksheet/test routine, it had also been quickly squelched by the dominance of a curriculum that, by itself, could not lead to joyful learning experiences.

The Logical Approach Was Not The Best Approach

Logically, if lists of skills and mandated textbooks comprised the required curriculum, it made sense to teach the elements separately and systematically, and to reserve exciting and enjoyable activities for special occasions, time permitting. However, according to de Bono (1991), this type of rigid "'rock logic'" (p. 8) could actually block the path to constructive solutions. The teachers at the writer's school were keeping themselves steeped in a mire of ineffective strategies. Focusing on skills in order to teach the skills was inadequate in terms of generating sustained and intrinsic interest in the subject matter. Furthermore, externally motivating students to comply with the demands of teachers and administrators also seemed logical, but this, too, was inadequate for generating a long-term love of learning. The tenacious fix on logical solutions led the teachers at the writer's school nowhere except back to the original and pervasive problem of student academic apathy.

Relationship of the Problem to the Literature

Almost a decade ago, Snow (1982) observed that teenagers appeared to exert little effort in learning tasks and that they lacked the motivation to strive toward academic goals. Later, Mackey and Appleman (1983) reported an increasing surge in academic apathy, where greater numbers of students

appeared "uncommitted to school" (p. 30). The problem of academic apathy has not abated in recent years. Covington, Webb, Guthrie, and Pipho (1990) raise concern for students' lack of motivation toward schoolwork, warning that nearly one quarter of those currently beginning first grade will not graduate from high school. Nelson-Le Gall (1990) notes that students are not generally willing to expend the effort necessary for sustained academic success. Specifically at the middle school level, Toepfer (1992) states that there is a need for students to recapture an "exuberence" (p. 6) for learning that seems to be absent in early adolescents. What has led to the continued and pressing problem of academic apathy over the years?

Imposed Curricula and a Resulting Disregard for Student Needs

It is accepted, standard practice for most schools to prescribe a basic scope of subjects that, although required, "hold little or no spontaneous interest for the developing child" (Deci & Ryan, 1985, p. 261). Regardless of the students' view of a subject's importance, children are expected to passively comply with the demands and requirements imposed upon them by the school (Massialas, 1990; Mc Caslin & Good,1992; Nelson-Le Gall, 1990; Wiggins, 1987). However, compliance is no substitute for the acquisition of meaning born of student interests and concerns (Glasser, 1990), and passive compliance is a breeding ground for apathy (Massialas).

Neel and Cessna (1990), in noting reasons for disruptive and disinterested behavior in students, suggest that it is possible to lose sight of the children's needs when the teacher is wrapped up in delivering the prescribed scope of study. When students must acquire skills that they personally do not view as useful or important, those skills are "devalued" (Bettelheim, 1989, p. 4) and "meaningless" (Maslow, 1976, p. 165) for the child.

Jacobs (1989) goes so far as to state that when subjects are taught "based on a textbook used in isolation from [their] applications . . . [they become an impetus for] driving students out of school" (p. 4). Arnold (1991) and Toepfer (1992) also view imposed curricula as a chief reason why students drop out and become disengaged from the educational process, since there is a lack of relevance between what is studied in school and what is important to young adolescents.

It is now acknowledged that the connection between coursework and the students' lives does not occur automatically or spontaneously (Beane, 1990b; Toepfer, 1992). When these connections are not made, the result is a lack of motivation to apply skills that have been previously learned (Ames & Archer, 1988; Beane, 1990b). Or the students will comply in order to finish a task, with little regard for the quality of the work they produce (Glasser, 1992). In either case, work of poor quality, or no work at all, are symptoms of boredom (Arnold, 1991; Caine & Caine, 1991; Glasser, 1990; Hanna, 1992) and apathy (Arnold).

Suppression of Individuality

William Glasser (1990), after interviewing numerous students in both junior and senior high schools, has concluded that "feeling important (powerful) in school is an alien experience" (p. 432). When a student's importance and individuality is ignored, behavioral distractors can add fuel to the apathetic fire started by a disregard for student needs. Koepke (1989/1992) has extensively documented the increased disinterest in schoolwork that can result when teachers of adolescents exert too much control over their students' learning, thereby suppressing the students' naturally emerging individuality and independence. In this case, the

children may "[turn] to less positive arenas to pursue identity development" (Toepfer, 1992), acting out their collective frustration in a variety of negative ways. Indeed, Eccles and Midgley (1989) assert "that there is a developmental mismatch" (p. 174) between the natural need for individual self-expression of adolescents and the stifling, coercive, and restrictive atmospheres of most secondary schools. To Eccles and Midgley, it makes little sense to restrict the movement and autonomy of adolescents and then to expect that such developmentally inappropriate practices will not produce negative effects.

Separation of Knowledge and Feelings

There is another dimension to the apathetic attitudes and lack of effort displayed by many students as a consequence of prescribed curricula. Lounsbury (1991) states that "underachievement is not the result of deficiencies in the head so much as it is the result of deficiencies in the heart" (p. 5). The current curriculum is efficient in imparting facts, but it does not connect to one's basic humanity. Kohn (1991) points out the pervasive lack of attention to caring and feeling for oneself and for others in the current school environment, with its emphasis on academics and the amount of knowledge acquired. Indeed, Willi Aeppli (1970/1986) graphically admonishes teachers who use grammar as "an instrument of torture . . . [that alienates] all joy in human speech" (p. 101). He decries history taught "as an endless collection of facts . . . [that can] only extinguish life" (p. 101).

The primary purpose of education must be more than the stuffing of content and competencies into the child; yet, in Maslow's (1976) words, "most [learning is] . . . beside the 'humanistic point' . . . [it is] the acquisition of associations, of skills, and of capacities that are external and not intrinsic to the human character, to the human personality, to the person himself" (p.

162). Devoid of feeling, the required work gets done, but its value eludes the inner nature and humanity of the child.

Emphasis on External Motivators

Lepper and Hodell (1989) blame the predominant use of "functionally superfluous extrinsic rewards" (p. 76) for sapping, from students, any intrinsic desire to learn. It is common practice for extrinsic motivators to be dangled like "carrots" (Covington et al., 1990, p. 1) or held over students' heads like threats (Caine & Caine, 1991; Covington, et al.; Deci & Ryan, 1985; Kahn, 1991; Maslow, 1976). Grades, stickers, special privileges or punishments become the external drivers of behavior since there is little to intrinsically motivate students when confronted with subject matter that is unrelated to their interests and feelings.

It is ironic that the extrinsic measures used in attempts to *engage* or *motivate* students in the past have been shown to perpetuate student disengagement, disinterest, and apathy -- the very problems they were designed to eliminate. Kohn (1991) names extrinsic motivators as the culprits in maintaining an external orientation toward the worth of doing a particular task, stating that people who get used to such bribes and rewards learn to expect them. The rewards devalue the worth of the task, which is no longer done for its own sake if nothing extrinsic is offered. Some students may even become "'grade junkies' who will do nothing in school unless it is rewarded by a grade" (Thomason & Thompson, 1992, p. 339).

The net result is a student's loss of self-determiniation (Deci, 1984; Deci & Ryan, 1985), as the child initiates behaviors for the rewards gained, rather than because of an intrinsic desire to perform the task. Indeed, the level of a student's performance may belie his or her underlying impetus to achieve so

that even while appearing to do well, the child may not be operating from any intrinsic desire to succeed (Deci & Ryan). State Deci and Ryan, "rewards may be detrimental to development because they tend to be experienced as controlling and to foster an external locus of causality, thereby undermining intrinsic motivation" (p. 125). This leads to a demotivation with regard to intrinsic desires and deprives students of the inner joy that true learning can generate (Caine & Caine, 1991). In the words of Troxler, quoted by Aeppli (1970/1986), the achieving child "'may win the world but . . . lose his soul'" (p. 6) in relation to self-fulfillment and the joy of learning.

Confusion Over Effort, Ability, and Outcomes

As students develop a more external locus of control, they often lose sight of their own power to effect positive learning outcomes, attributing their success more to the luck of an easy test than to their own study efforts (Nelson-Le Gall, 1990; Raffini, 1988; Thomason & Thompson, 1992). Thus, some children no longer feel that it matters how hard they work (Raffini; Thomason & Thompson). Others tend to increase their "dependency-orientation" (Nelson-Le Gall, p. 15), preferring to let their peers put forth the effort. Sometimes, the pressure to succeed, along with rigid and unrelenting time constraints, cause students to stop putting forth any effort at all, due to the perceived futility of the task (Caine & Caine, 1991; Lepper & Hodell, 1989; Raffini). In this case, the child is desperately trying to preserve his or her self-worth; if the task appears to be too challenging, the child opts not to try at all, rather than to risk the possibility of failure.

Downshifting

Pressure and time constraints may cause another phenomenon: that of "'downshifting'" (Caine & Caine, 1991, p. 64), a physiological condition

where, as a result of an increased secretion of cortisol by the hippocampus under sustained stress, the brain's capacity for higher-order cognitive processing is diminished. When students downshift, they do not necessarily refuse to do the work. Rather, they opt to do only what is required, and to get the assignment done as quickly as possible. In this downshifted state, students do no more than asked by the teacher, often expecting an extrinsic reward or grade for their efforts. Such students are demotivated -- not to the point of refusing to work, but to the point where they only do the work in order to survive, not to achieve or to learn. Caine and Caine strongly "suggest that most schools maintain most students in a downshifted state and prevent them from engaging in the complex learning that we profess to desire and need" (p. 75). The quality of the students' work remains low.

The Dearth of Quality in Educational Experiences

A related prespective on the downshifted quality of student work is explicated by Glasser (1990, 1992), who emphasizes that students in most schools produce little work of quality because they cannot see how most of what they do has any useful connection to their lives. When threatened or coerced, students will go through the motions of completing their assignments, but their work will be of low quality, and their disinterest in the tasks will not abate. Coercive, "boss management" (Glasser, 1990, p. 428), grounded in traditional, behaviorist theory, pits students against teachers and, in Glasser's (1990) words, "rarely leads to consistent hard work -- and almost never to high-quality work" (p. 428). In addition, measuring quality in terms of the number of questions correctly answered on machine-scored, standardized tests reduces education to the memorization of facts in order to prepare for testing. Such work is neither satisfying nor self-fulfilling; it is just

drudgery, and it is downright boring. This triggers resistance on the part of students, and this resistance leads to what is perceived as discipline problems. Glasser (1990) contends that these discipline problems are a symptom of "unsatisfying" (p. 430) educational experiences.

McCaslin and Good (1992) underscore Glasser's (1990, 1992) insights. These researchers have examined the structural causes of poor academic performance and have found that the prevalent and continued use of external motivators and simplistic behavioral strategies "undermine extant motivation and quality of learning" (p. 11). Like Glasser, McCaslin and Good blame a low-level curriculum of skill coverage and rote memorization, combined with a coercive management style, for poor school performance and student disinterest. Too, Ryan and Stiller (1991) state that "externally imposed evaluations, goals, and pressures seem to create a style of teaching and learning that is antithetical to quality learning outcomes in school, that is, learning characterized by durability, depth, and integration" (p. 143). Thus, poor quality schoolwork abounds, and students exhibit little motivation to improve.

Feelings of Powerlessness and Despair

A general sense of powerlessness exacerbates the lack of importance students see in the subjects they learn, thereby heightening student apathy toward academic tasks. Mackey and Appleman (1983) describe a phenomenon they call "apoliticism" (p. 32), a contagious strain of classroom apathy that is applied to the social studies and extends to general feelings of "the . . . futility of political action" (p. 31). The students have learned to be passive in the classroom, which ultimately leads to a continuation of this helplessness and to a detachment toward democratic processes outside the classroom as well

(Massialas, 1990). Students do not feel empowered by what they learn in school (Boulding, 1988), and Berman (1990), as President of Educators for Social Responsibility, expresses great concern over growing feelings of despair and a "sense of powerlessness to affect constructive social or political change . . . [in young people resulting in] their withdrawal from active participation in our society" (p. 75). Ultimately, apathy in the classroom today may be the forerunner of apathy in the citizenry of tomorrow.

The intrinsically satisfying importance of learning is thus obscured behind a clouded cataract of an imposed curriculum, foreign to the child, that necessitates extrinsic pressures to succeed. This extrinsic pressure backfires in a myriad of negative ways, much to the dismay of teachers and administrators.

CHAPTER III

ANTICIPATED OUTCOMES AND EVALUATION INSTRUMENTS

Goals and Expectations

The following goals were projected for this practicum. The first goal was to enable participating teachers in the writer's school to implement lessons that encouraged intrinsically-motivated engagement, enthusiasm, and joy in student learning. A second goal was to enable participating teachers to employ lessons that merged a knowledge of subject matter with the practical use of that knowledge in real-life settings. The writer's third goal was that, as a result of the practicum, participating students would exhibit increased interest, engagement, and achievement in their academic work, along with a decrease in deviant behaviors.

Behavioral Objectives

The following objectives were projected for this practicum:

1. After practicum implementation, all participating teachers will be able to create lessons that incorporate real-life concerns while still imparting essential content and skills, as demonstrated by the full completion (100 percent) of ten lesson outlines that each include a description of how the students are using their knowledge for practical, real-world applications.

2. After beginning a series of inservice workshops, and throughout the implementation of this practicum, all participating teachers will be able to identify the specific teaching strategies that they are using to develop intrinsic enjoyment of learning in their students, as verified through the writer's biweekly oral interview with each participating teacher, where each strategy

named by the interviewees will completely correspond (100 percent) to strategies presented to the participating teachers during an ongoing series of training sessions.

3. After the implementation period, all participating teachers, using a checklist of observed collective student behaviors, will indicate both an increase in the intrinsic engagement of students and a decrease in negative behaviors, as verified by a gain of at least five "engaged" and "respectful" behavioral indicators checked off by each teacher, when compared with the number of "engaged" and "respectful" student behaviors observed at the beginning of the implementation period.

4. At the end of practicum implementation, all participating students, in classroom situations, will exhibit at least a 50 percent decline in their defiant attitudes toward peers and adults, as indicated by monthly referral records kept by participating teachers, and by quarterly suspension records of participating students as determined by the administration.

5. At the end of practicum implementation, participating students will exhibit a decline in the number of course failures in classes conducted by participating teachers, as indicated by the quarterly grades of each participating student, where the number of failures at the end of the second marking period will be at least 50 percent below the number of failures recorded at the end of the first marking period.

6. At the end of practicum implementation, participating students will exhibit an increase in the optimum quality of their classwork, as indicated by the quarterly grades of each participating student, where the number of "A" grades at the end of the second marking period will be at least 25 percent

higher than the number of "A" grades recorded at the end of the first marking period.

7. At the end of implementation, participating students will exhibit an increase in feelings of intrinsically-motivated enthusiasm, empowerment, and joy in their learning experiences, as measured by student self-reports in which students exhibit a mean gain of at least five positive attributes when compared with the results of the same self-report administered at the beginning of the implementation period.

Measurement of Objectives

For the first objective, each lesson outline included targeted real-world activities, along with the required content and skills to be utilized in the completion of those designated activites (see Appendix B). Each teacher was asked to complete ten lesson outlines, spaced evenly throughout the implementation phase of the writer's practicum, and the writer planned to use these outlines as indicators of the connection between content, skills, and real-life concerns.

Measurement of the second objective was to be effected by the periodic responses of each participating teacher to the writer's queries about their chosen classroom strategies, recorded on a form developed by the writer (see Appendix C). The writer planned to log each strategy reported by the interviewee, comparing each response with a growing list of strategies presented to the participating teachers throughout practicum implementation, and the writer would then indicate whether the interviewee's strategy was of a type that corresponded to methods known to develop intrinsic enjoyment of learning in students.

Attainment of the third objective was to be assessed by the use of a checklist consisting of 16 positive student behaviors derived from the writer's interviews with teachers and administrators regarding "engaged" and "respectful" behaviors lacking in students at the time the problem for this practicum was identified (see Appendix D). The first eleven behaviors addressed intrinsic student engagement, and the last five targeted specific, respectful behaviors. Each teacher was to decide whether a given behavior was present or absent, or the teacher would indicate uncertainty as to whether a particular behavior was overtly evident in the students at the time the checklist was being filled out. Because positive indicators could fall in either the "yes" or the "no" column, depending upon the wording of the question, the writer planned to hand-score each teacher checklist, using a template revealing positive responses only (the template pattern, with the positive spaces to be cut out indicated by an "X," can be found in Appendix D). The number of each teacher's positive responses for each section at the beginning and at the end of practicum implementation was to be recorded on a form developed by the writer for that purpose (see Appendix E).

For the fourth objective, teachers would document, on a monthly basis, all referrals to administrators resulting from defiant actions and report this number to the writer during interviews spaced throughout practicum implementation. Each participating teacher would also report the number of times a referral resulted in the suspension of a student. Since administrators were required to document the actions taken on a referral, this data would be easily forthcoming. The writer planned to record the number of referrals and suspensions for students in each teacher's targeted class on a monthly basis.

Records for the fifth objective were to be kept by the writer, who planned to query each participating teacher as to the total number of failures earned by their participating students at the end of each marking period within the implementation of the practicum. Two marking periods spanned the duration of the writer's practicum.

For the sixth objective, records were to be kept by the writer, who planned to ask each teacher for the total number of "A" grades earned by their participating students at the end of each marking period during practicum implementation. The writer therefore planned to keep these records for two complete marking periods.

To measure the attainment of the seventh objective, the writer developed a student self-report in the form of a questionnaire with *agree/disagree/no opinion* statements adapted from the Children's Academic Intrinsic Motivation Inventory (Gottfried, 1986), the School Attitude Measure (Wick, Dolan, & Enos, 1989), and descriptions of joyful and empowered learning compiled from Berman (1990), Bodemuller (1990), Maslow (1976), and Steiner (1924/1988) (see Appendix F for the writer's student self-report form). The self-report was a written instrument, designed to be administered once at the beginning and once at the end of practicum implementation. No time limit was designated for students completing the instrument. Each self-report was to be hand-scored using a template revealing positive responses only (an example of the template pattern, with the positive spaces to be cut out indicated with an "X," can be found in Appendix F). The mean number of positive responses for each participating class would be recorded by the writer at the beginning and at the end of practicum implementation.

CHAPTER IV

SOLUTION STRATEGY

Discussion and Evaluation of Solutions

The teachers in the writer's school were concerned about a student body that largely reflected a negative attitude toward academics and the general school environment. The teachers were not able to present the required subject matter in a manner that could spark intrinsic enthusiasm, engage students, or lead to increasingly positive attitudes toward school in general and toward classwork in particular.

A Survey of Solution Strategies

The Decline of Extrinsic Motivators

In recent years, the literature has been rife with treatises condemning the application of behaviorist theory and its classic system of extrinsic punishments and rewards as a means of motivating students to accomplish academic tasks. Deci (1984) noted that when people developed the habit of expecting a reward for performing any task, they began focusing more on the reward than on the value of the activity itself, thereby thwarting their inner initiative to do that particular activity. In other words, if people originally engaged in a task of their own volition, the use of extrinsic rewards actually lessened their inner desire to continue performing the activity.

Extensive research by Deci and Ryan (1985) subsequently served to confirm and extend Deci's (1984) observations. Deci and Ryan found that extrinsic motivation not only undermined the development of self-determination and self-regulation, but it was also "negatively related to

learning" (p. 142). Later research conducted by Caine and Caine (1991) revealed that behaviorism, as applied in school settings, actually served to demotivate students as it "deprived . . . [students of] . . . the joy and excitement that are the consequences of real learning" (p. 16). Furthermore, learning extracted under conditions of coercion or threat was seen, by Caine and Caine, to cause students to revert to a downshifted state that blocked deeper cognitive processing of the information acquired.

Lepper and Hodell (1989) have outlined a variety of problems that may arise as a consequence of using extrinsic rewards to counteract a lack of intrinsic motivation for learning, including a diminished desire to learn on one's own and an increased preference for boring but simple tasks that are quickly and easily accomplished. Glasser (1990, 1992) views simplistic stimulus-response approaches to classroom management as destructive and as a contributor to work of low quality. Kohn (1991) bluntly asserts that the only end extrinsic rewards serve to accomplish is to build, within students, a desire to work for more external rewards. Ryan and Stiller (1991) lament that education has become inundated under a weighty cloud of external regulations and pressures that serve to perpetuate quick, extrinsic fixes adding little quality or depth to most present-day learning.

McCaslin and Good (1992) make a distrinction between obedience and true intrinsic motivation, warning that if intrinsic motivation is the desired outcome, then extrinsic rewards are <u>not</u> the means for its attainment. Citing Lepper, McCaslin and Good suggest that if extrinsic motivators are used at all, they should only be used to initially launch a desired behavior, stating that "in the classroom, instilling student motivation involves the judicious use of external rewards that are then faded" (p. 11). They recommend a more

authoritative and democratic management style that encourages students to find reasons for what they are asked to do, rather than to automatically do what they are told. According to McCaslin and Good, students should be given opportunities for responsibility and self-control, in a scaffolded progression allowing for student choices and self-direction. They favor a problem-solving curriculum maximizing opportunities for students to take the initiative and control their learning tasks.

What type of activities encourage student independence and initiatives? Lepper and Hodell (1989) suggest four rich sources of intrinsic motivation: challenge, curiosity, control, and fantasy. In *challenge* activities, students asked to work at an optimal level, where tasks are neither too easy nor too difficult, but challenge students to increasingly stretch their abilities as learning progresses. Activities sparking students' *curiosity* should create enough disequilibrium between what the students know and what they wish to know that they are transformed into active "information [seekers]" (Lepper & Hodell, p. 92). *Control* opportunities become intrinsically motivating when students are granted increased autonomy in their academic tasks. Finally, *fantasy* in learning embellishes otherwise ordinary tasks by offering fulfillment in a vicarious sense, through one's identification with fictitious heroes, and by connecting the learner's imagination with a rich abundance of feelings, images, and accomplishments. All in all, the strategies recommended for increasing student engagement and eliminating academic apathy no longer center around behaviorist theory and extrinsic rewards for obedient compliance with teacher demands. The specific strategies detailed below reflect a quest toward satisfying students' inner needs for challenge, curiosity, control, and fantasy.

Cooperative Learning

One strategy specifically recommended as a means of overcoming academic apathy is cooperative learning. Raffini (1988) notes that students tend to work harder when they belong to a group, and Covington et al. (1990) state that a child's commitment and feelings of responsibility are increased in cooperative situations. Because of the availability of immediate peer assistance when properly employed (Raffini), cooperative learning offers the potential to increase students' feelings of self-esteem as peer groups work to achieve collective goals. Kohn (1991), along with Caine and Caine (1991), view cooperative learning as a means of incorporating care and concern for others into everyday school experiences. Caine and Caine stress that "friendship and companionship are both intrinsically important to us" (p. 117), thus providing a naturally-motivating setting in which learning can take place.

Attribution Retraining

Another strategy identified as useful in promoting more positive attitudes toward learning is the process of retraining students to view their successes or failures as results of their own efforts, rather than due to the easiness of the task or to luck. Termed "attribution retraining" (Raffini, 1988, p. 24), this is a process where students are taught to differentiate effort from ability by experiencing success and by identifying the critical element of personal effort that has led to this success. The element of effort is important to the degree that it gives students a personal feeling of control over their learning (Nelson-Le Gall, 1990). Thomason and Thompson (1992) have observed that students become "better learners" (p. 278) when they believe that they have the power to influence a learning outcome for better or for

worse. According to Raffini, "by focusing on the attributes for success and failure, teachers can help apathetic students realize that increased effort can lead to success" (p. 26). Schunk (1991) adds that students will take more pride in their work and feel more self-satisfied when they attribute their success to their own efforts. These positive inner feelings become motivators for increased and sustained effort in the future.

Outcome-Based Instruction

A third strategic option for eliminating student apathy is the practice of outcome-based instruction (Raffini, 1988) or mastery learning (Joyce & Weil, 1986). This approach involves equating ability or aptitude with the time it takes to master particular instructional objectives (Joyce & Weil) and allows students to take alternate forms of a test if they need more time to master a given task (Joyce & Weil; Raffini). The time pressure is therefore relaxed, and a student need not feel inadequate or incapable simply because time runs out before the subject matter is learned. Outcome-based instruction is seen, both by Raffini and by Nelson-Le Gall (1990), as a means of supporting and enhancing attempts to implement attribution retraining because, in Raffini's words, it "suppresses the ability-outcome linkage that undermines self-worth and contributes to student apathy" (p. 23). Glasser favors the mastery of content, but in an alternate sense that goes beyond mere mastery for its own sake. He states that quality is not simpy the mastery of skills, but is derived from an inner feeling that what one is doing is satisfying and worthwhile. Glasser affirms that when students see the intrinsic or enjoyment value in the work they are doing, they are motivated to produce work of high quality.

Adding Intrinsic Value to School Work

Toepfer (1990) asserts that "young adolescents learn best when they can see the value in their lives of the facts and skills taught in the classroom" (p. 18). If the content taught is not perceived as meaningful to the students who must study it, then the intrinsic desires and needs of the students are subverted in the wake of the "force feeding [of] a canned curriculum" (Lounsbury, p. 4, 1991) to students who have no inner desire to learn it. To that end, numerous educators recommend the development of a curriculum that includes, at least in part, topics and questions emanating directly from the children (Arnold, 1991; George, Stevenson, Thomason, & Beane, 1992; Hendrickson, Roth, & Gable, 1990; Lounsbury, 1991; Neel & Cessna, 1990).

Research conducted by Hendrickson et al. (1990) has revealed that when students with behavior problems work cooperatively on problem-solving projects related to real-life issues chosen by the students, the children remain interested and engaged in the task. The students involved in the Youth 2000 Visions (Y2000V) research conducted by Hendrickson et al. met on their own time, after school. Participating youth chose relevant problems needing their attention, developed solutions, and followed their plans through to completion. The success achieved by the students as a result of Y2000V has led Hendrickson et al. to conclude that "it would appear that teachers and youth leaders may find utility in arranging interactions which challenge the ingenuity, intelligence, and concerns of adolescents" (p. 78). When students were challenged in this manner, they became engaged and animated, rather than detached, disruptive, or apathetic.

Group problem-solving to increase student interest and ownership can be seen in other formats as well. Specifically, Group Investigation (Sharan &

Sharan, 1989-1990) is an inquiry process that affords student study groups opportunities not only to choose topics of personal interest, but also to generate their own questions about a subject under study, instead of relying on questions given to them solely by the teacher or the textbook. A combination of elements from both Group Investigation and Y2000V is found in Bodemuller's (1990; Friedman, 1990b) approach to adding joy to the learning process, as group inquiry is merged with social action to enhance the students' feelings of ownership toward the topics under study. In addition, the process of group inquiry favors open-ended questions that can generate a variety of answers. It is an approach also recommended by Wiggins (1987), Jacobs (1989), and by Edelsky, Altwerger, and Flores, (1991) in the general planning of curricula.

Incorporating Social Responsibility and Action

Social action is specifically recommended by many educators as a viable and effective means of shaking academic apathy by actively engaging students in academic tasks that link what the students are learning to experiences in the real world. Kohn (1990) calls for the development of prosocial behavior that encourages students to develop caring and empathic attitudes toward others. For this to occur, students must be encouraged to work cooperatively, to think about the reasons for what they are doing (as opposed to the absence of thought in stimulus-response behaviors), and they are led to discover the innate value of performing academic tasks, instead of expecting extrinsic rewards for task completion. In this way, student autonomy is enhanced, as is the notion that some tasks are worth doing because they make a person feel good inside. In the same context, Wentzel (1991) asserts that "social and cognitive outcomes are mutually dependent and facilitative" (p. 186). In her

research, Wentzel has found that goals directly related to social responsibility have an optimum effect on students' achievement outcomes. Massialas (1990), along with Mackey and Appleman (1983), state that social action and democratic processes should be firmly integrated into academic life. Nelson-Le Gall (1990) echos that sentiment, in stating that motivation should be "an outcome of meaningful participation in the classroom and the social practices that accomplish its everyday practical activities" (p. 6).

Toepfer (1990, 1992) emphasizes the need for students to apply the knowledge gained at school to real situations beyond the classroom walls. Berman (1990) stresses that the development of social responsibility in students helps to overcome student feelings of despair and powerlessness and enables them to feel that they can make a difference in the world. Adams, Pardo, and Schneidewind (1991/1992) proclaim that "empowerment necessitates social responsibility" (p. 42). This point is visually illustrated in Berman's despair-empowerment curve, where the despair following the acquisition of unsettling information is contrasted with the empowerment resulting when students can explore those issues, develop strategies, and take action for positive change. Yager (1990) calls for a new view of science instruction that incorporates "personal and societal issues" (p. 46) that reach beyond the confines of the classroom, stating that student attitudes improve with this type of educational approach.

Using education for social responsibility is considered a viable means to "excite [the] passions" (Arnold, 1991, p.12) of children in school. Passion is the opposite of apathy. That is why Bodemuller (1990) has incorporated social action into her "Units of Joy" (Friedman, 1990). In his book The Student As Worker, Wiggins (1987) urges teachers to "[get] the incentives right" (p. 18). If

students can explore and act upon inner and personal concerns they view as relevant, then one can forego extrinsic rewards to entice students into completing academic tasks.

Developing A Meaningful Curriculum

George et al. (1990) outline a model for organizing the curriculum around general themes that can simultaneously link the personal developmental concerns of young adolescents with social and global issues. Yet the use of integrated, interdisciplinary themes extends beyond its applicability to social action; it is a method, in itself, of heightening the relevancy of the material being learned. Caine and Caine (1991) refer to the integration of subjects and thematic teaching as "brain-based schooling" (p. 89), where information is transformed into meaning because the brain simultaneously can find a multitude of common connections for specific facts and concepts, thereby reinforcing the learning in a multidimensional sense. Thus, the brain research of Caine and Caine supports Jacobs (1989) in her claim that subjects make more sense to students when the information from each content area is interconnected; Beane (1990), Koepke (1989/1992), and Staley (1988) also agree that themes offer a coherent context, as opposed to learning bits of skills and facts in isolation.

The recommended organization of curricular themes takes a variety of forms. Those subscribing to the Waldorf method of education arrange prescribed content around themes matched to the development of the child as it parallels the history of humankind (Aeppli 1970/1986; Koepke, 1989/1992; Lindenberg, 1989/1989; Staley, 1988; Steiner, 1924/1988). For example, in the sixth grade, because students entertain "a fascination with . . . laziness and self-indulgence [that marks] . . . the passing of the golden age of

childhood" (Staley, p. 144), curricular focus, according to Staley, should be on the Roman Empire, so that the triumphs and difficulties of pre-adolescents can be reflected in the attributes of that era in history.

Other educators view the thematic organization of curricula somewhat differently. That curricular themes should focus upon local and world issues of concern to young adults in the middle school is aggressively championed by Beane (1990) and by Toepfer (1992). George et al. suggest organizing themes around the personal and global concerns of students in a more or less preplanned manner, while allowing for advance student input insofar as determining what those themes should be. On the other hand, Lounsbury (1991) goes so far as to advocate a form a "zero-based curriculum" (p. 3), where teachers coordinate the study of relevant issues with a substantial amount of student input, and where the curriclum is jointly planned by teachers and students so that the students' concerns are not dwarfed by prescribed adult priorities. Still other educators urge a paradigm shift where the students, instead of merely studying about different subject areas, use the facts, concepts, and skills from those subject areas in order to explore theme-based inquiries (Altwerger & Flores, 1991; Edelsky et al., 1991; Wiggins, 1987). In this way, knowledge takes on an inherent usefulness, instead of being passively gathered for the sole purpose of seeing how much a student can retain at one time.

The use of thematic content coverage should not be confined to one single attempt per year. In fact, Toepfer (1992) advocates building the entire middle school curriculum "around a progressing series of themes and issues" (p. 9) rather than occasionally fitting an interdisciplinary unit into the busy, regular curriculum. In a similar vein, Edelsky et al. conceptualize thematic,

interdisciplinary units as ongoing in the sense that initial issues and concerns are generated by the students, and that subsequent thematic units build upon or branch out from the issues previously explored. Like Toepfer, Edelsky et al. view a cycle of such student-generated themes as the curriculum -- not as an intermittent add-on to be fitted in as time permits.

Integrating Feelings With Content

The feelings of students must not be forgotten when endeavoring to overcome academic apathy. Steiner (1924/1988), in his book entitled The Kingdom of Childhood, urged educators, first and foremost, to "start with life itself" (p. 129); he regarded contrived math problems or reliance on textbook explanations in other subjects as "poison" (p. 135) to the child because it was alien to what was alive and real. Willi Aeppli (1970/1986) also spoke of the need for teachers to help children absorb subjects in the child's "innermost being in such a way that he carries within him something quite different from merely x amount of knowledge" (p. 103). Similarly, Edelsky et al. (1991) draw a detailed distinction between "writing exercise [and] written language in use" (p. 22). Mock business letters that will never reach their destination, worksheets, and the completion of canned beginnings to stories are all considered "fake writing" (p. 22) by Edelsky et al, because these tasks serve no purpose other than to provide an activity for the teacher to grade. Education must serve human purposes (Maslow, 1976), and teachers need to guard against providing students with activities that "extinguish life" (Aeppli, p. 101). Rudolf Steiner's words sum up the teacher's role in this sense: "You must guide the child to think only about things that are to be found in life. Then through your teaching reality will be carried back into life again" (p. 135).

It is this additional connection -- the connection with the feelings and the humanity of the child -- that can be viewed as an intrinsic motivator, as opposed to extrinsic motivators such as grades and stickers (Caine & Caine, 1991). Here lie the senses of wonder (Querido, 1987) and inner joy (Bodemuller, 1990, Caine & Caine, 1991; Maslow, 1976; Toepfer, 1992) that erase apathy by causing learning, itself, to become a "peak experience" (Maslow, p. 80).

Using the Arts to Connect With The Inner Nature of the Learner

The literature reveals that learning can become a joyful and creative experience for students by integrating the arts into the educational process (Caine & Caine, 1991; Barnes, 1991; Dean & Gross, 1992; Maslow, 1976; Mollet, 1991; Querido, 1987; Richards, 1980; Steiner, 1924/1988; Wilkenson, 1980). Indeed, Caine and Caine emphasize the importance of "orchestrated immersion . . . [taking] information off the page and blackboard and [bringing] it to life in the minds of students" (p. 107), which incorporates the context of how students receive the information to be learned. As a part of this immersion, Caine and Caine state that a "multisensory representation" (p. 113) of the subject matter is necessary, and that the creative use of drama, art, music, and dance are included as ways of "more fully bringing the body" (p. 113) and the senses into any learning experience. Brown (1975) and his colleagues (Bogad, 1975; Shapiro, 1975; Shiflett, 1975) term this blending of cognition and affect "confluent education" (Brown, p. 101), and assert that this blending is necessary in order to breathe life into the educational process.

Activities like puppet-making, mural-painting, and the creation of songs, plays, and dances have been found by Dean and Gross (1992) to "combat boredom" (p. 613) in students while enabling the children to effectively learn

basic skills. Querido (1987), too, favors lessons that climb out of the textbook and are "created artistically . . . [incorporating] dialogue, singing, . . . poetry, writing . . ." (p. 63). Indeed, music, drawing, dancing, and rhythm (Caine & Caine, 1991; Maslow, 1976; Mollet, 1991; Querido; Richardson, 1980; Steiner, 1924/1988; Wilkinson, 1980) and the dramatic arts (Barnes, 1991) are viewed as essential parts of the core curriculum -- not as expendable frills. On the whole, academic activities, in order to tap the intrinsic nature of the child, should treat the student as a "human being . . . not just [with] a brain, but a being with heart and limbs -- a being of will and feeling, as well as of intellect" (Barnes, p. 54).

Evaluation and Synthesis of Solutions

The review of the literature cited above revealed a number of possible intrinsic options for the writer to consider in developing a strategy for overcoming academic apathy in her school. In seeking a remedy for apathy and student disinterest in learning, many educators appeared to share a common thread: they specifically recommended at least some degree of student input regarding the topics, questions, or problems to be studied (Arnold, 1991; George et al., 1990; Hendrickson et al, 1990; Lounsbury, 1991; Neel & Cessna, 1990; Toepfer, 1990, 1992). The use of cooperative learning (Caine & Caine, 1991; Covington et al., 1990; Kohn, 1991; Raffini, 1988) could be combined with group inquiry (Bodemuller, 1990; Friedman, 1990b; Sharan & Sharan, 1989/1990; Wiggins, 1987) and social action (Bodemuller; Friedman; Hendrickson et al., 1990) in order to heighten student interest in the work they were doing in class. Indeed, educating students for the purpose of becoming empowered and effective citizens (Adams et al., 1991-1992; Arnold, 1990; Berman, 1990; Bodemuller; Caine & Caine; Friedman;

Hendrickson et al.; Kohn, 1991; Mackey & Appleman, 1983; Massialas, 1990; Nelson-Le Gall, 1990; Toepfer, 1990, 1992; Wentzel, 1991; Yager, 1990) appeared to be a way of "giving the child a sense of accomplishment" (Maslow, p. 181) in an intrinsic sense (Deci, 1984; Deci & Ryan, 1985; Maslow; Wiggins) and of providing opportunities for students to do "important things" (Sizer, 1985, p. 227) by using information instead of just learning about the topics under study (Altwerger & Flores, 1991; Edelsky et al., 1991; Wiggins).

The writer also considered the integration of curriculum across a variety of subject areas as another way of heightening student interest and, consequently, of reducing apathy toward learning tasks (Aeppli, 1970/1986; Altwerger & Flores, 1991; Beane, 1990; Bodemuller, 1990; Caine & Caine, 1991; Edelsky et al., 1991; Friedman, 1990b; George et al., 1990; Jacobs, 1989; Koepke, 1989/1992; Staley, 1988; Steiner, 1924/1988). Coupled with the practice of creating thematic units of study (Altwerger & Flores; Edelsky et al.; Friedman; George et al.; Jacobs; Koepke; Staley; Steiner) and open-ended questions that challenge the intellect (Bodemuller; Edelsky et al.; Jacobs; Wiggins, 1987), it seemed possible to create enriched learning environments in which students could work. Themes could either be developmentally-based (Aeppli; Koepke; Staley; Steiner), correlated with prescribed curricular elements (Friedman; George et al.; Wiggins), or grown out of the interests of the children (Altwerger & Flores; Bodemuller; Edelsky et al.; Lounsbury, 1991). Furthermore, the writer considered the possibility that rather than being a sporadic addition to an already crowded curriculum, such thematic studies might become the curriculum (Edelsky et al; Koepke; Staley; Steiner; Toepfer, 1992).

Even when prescribed elements of a curriculum were mandated, learning could be made intrinsically enjoyable if the visual and creative arts were used as multisensory avenues through which the content could be delivered (Aeppli, 1970/1986; Barnes, 1991; Bogad, 1975; Brown, 1975; Caine & Caine, 1991; Dean & Gross, 1992; Maslow, 1976; Mollett, 1991; Querido, 1987; Richards, 1980; Shapiro, 1975; Shiflett, 1975; Wilkenson, 1980). Too, as long as students worked on tasks relating to the way knowledge was used in real life (Aeppli; Steiner, 1924/1988) or on tasks involving real-world applications (Altwerger & Flores, 1991; Edelsky et al., 1991; Wiggins,1987), learning could be an activity imbued with life, and students could be energized instead of being turned off. That learning could be purposefully joyful was based upon philosophical, physiological, and pedagogical foundations. There were many avenues to reach the desired end.

Feasible Alternatives at the Writer's School Site

The recommended strategy of cooperative learning appeared reasonable as a starting point for eliminating academic apathy at the writer's school. First, the teachers were amenable to a strategy with cooperative learning at its core, since most of the writer's colleagues had at least a working understanding of that particular teaching method. In addition, more than half of the teachers at the writer's school had received a small amount of training in cooperative learning practices, even if they did not choose to use that method. Cooperative learning was also highly recommended for use with middle school students as a developmentally appropriate strategy (Wood, 1992). The writer did recall Snow's (1982) warning that there was no panacea likely to surface as the magic elixir for overcoming student boredom and disinterest in school. This warning appeared underscored by Caine and

Caine (1991), who cautioned that some cooperative learning practices could become so rigidly run as to negate the interactive and autonomous benefits usually derived from the use of that strategy. Cooperative learning, in and of itself, might not lead to the ends envisioned by the writer. It was necessary to choose a form of cooperative learning that could best facilitate the growth of student empowerment and engagement.

The Group Investigation model developed by Sharan and Sharan (1989-1990) held promise, especially when considering the nature and needs of young adolescent students. Young adolescents were simultaneously undergoing a myriad of changes. One of the most obvious and emphasized change was the physical transformation that altered a child's body, in a few short years, into that of an adult (Milgram, 1992). Another equally well-known characteristic was the strong social need of children between 11 and 17 years of age (Milgram). However, sometimes obscured amidst the overt physical growth and the boorish behaviors of packs of young adolescent peers was an irrepressible and unrelenting need for autonomy (Carnegie Council on Adolescent Development, 1989; Milgram, 1992) or individuality (Koepke, 1989/1992) and the accompanying quest for a personal identity (Erikson, 1963, 1968) that craved expression, for better or for worse (Koepke; Hamburg, 1989). Accordingly, the rude and obnoxious behaviors of many early adolescents were often manifestations of an intense desire for self-expression (Koepke; Kramer, 1992). The writer considered educators' warnings that it was unwise to suppress or to ignore the pervasive need for self-assertion that premeated the thoughts and actions of middle school students (Hamburg; Koepke), along with recommendations that teachers needed to create "constructive" (Hamburg, p. 12) avenues for this unremitting energy. Young adolescents

were in need of opportunities to make their own decisions so that the constructive avenues recommended by Hamburg could be paved (Carnegie Council on Adolescent Development; Eccles & Midgley, 1989). Group Investigation allowed students the opportunity not only to generate topics and questions, but also to choose the aspects of a topic that most appealed to them, thereby capitalizing on the need for constructive autonomy along with the equally strong urge to socialize, and providing an avenue for student input that nurtured ownership in academic tasks. Cooperative learning was an ideal method that meshed with young adolescents' social needs, and Group Investigation went beyond socialization, opening up numerous possibilities for student input and independence.

What of the idea of incorporating some form of social action into the cooperative learning base? Hendrickson et al. (1990), along with Bodemuller (1990), demonstrated that this integration was also feasable. It appeared desirable to incorporate a measure of social responsibility into a strategy designed to eliminate academic apathy, especially when developing the solution for young adolescents, who were ready for forays into advanced problem-solving and who thrived on opportunities for this positive form of self-expression. Young adolescents were developmentally ready for social and community service (Carnegie Council on Adolescent Development, 1989). They needed opportunities to make their own decisions, and their interest was sustained when they were given opportunities to pursue topics and issues that they deemed important (Toepfer, 1992). Activities that championed social responsibility enabled students to incorporate the practical use of knowledge with purposes beyond grades or the mere fulfillment of requirements.

If it was possible to design social action activities around interdisciplinary themes (George et al., 1991), it then became necessary to decide what themes might be most appropriate for study in the writer's school. In considering the use of developmentally-based themes similar to those employed by teachers in the Waldorf schools, the writer was concerned about the facility with which Waldorf themes might correspond to established state-mandated curricular frameworks. Although flexible in its own right (Stockmeyer, 1965/1991), the core Waldorf curriculum seemed less easily merged with the relatively inflexible mandated curriculum required in the writer's state and district.

The writer's colleagues repeatedly voiced the need to cover required curriculum; indeed, this emphasis thwarted more than one attempted innovation in the past. It was thus prudent to choose a thematic base that could correspond to the general state requirements first, and then reorganize that curricular framework around common themes. In this way, the primary concern of the teachers would be addressed. It was also for this reason that the writer, although she personally favored a curriculum growing completely from the needs and interests of the students, felt it more appropriate to heed Arnold's (1991) plea for balance between student-generated issues and the required content, incorporating both in the curriculum-planning process.

Another point to consider in developing a strategy to overcome academic apathy in students was whether the activities employed during the implementation of the writer's practicum should be sporadic additions to the curriculum, or whether those thematic units should actually be the curriculum, albeit reorganized somewhat differently than before. Bodemuller (1990) suggested that there was a momentum of joyful inquiry

that needed to be sustained, over time, in order to maintain the students' interest throughout the school year. A cyclical approach to curricular themes seemed to facilitate this momentum. Friedman (1990a, 1990b) and George et al. (1991) both suggested methods for integrating diverse subject areas into unified themes; the writer therefore decided that it would be possible to incorporate most of the state requirements within a series of interdisciplinary thematic units presented in ongoing cycles throughout the school year.

Despite the best of efforts to merge subjects and topics into a series of unified themes, the writer did anticipate that teachers might still feel compelled to teach at least some specific skills directly to their students. In this case, a multisensory approach to direct teaching could bring forth a different but still intrinsic connection between students and subjects, addressing the inner nature of the child so that extrinsic incentives would become unnecessary. Thus, the writer anticipated that the momentum favored by Bodemuller (1990) could be sustained in a general sense whether students were engaged in thematic explorations or in the acquisition of mandated skills and concepts. Nevertheless, in light of the young adolescent's needs for autonomy and self-expression, it appeared as though a predominance of student-driven, investigative activities would be more developmentally appropriate and, as such, more preferable.

In Whole Language: What's the Difference, Edelsky et al. (1991) not only championed the use of thematic cycles of study, but also suggested that whole language should be viewed holistically as "a paradigm, a framework" (p. 43) for instruction, not as just another teaching method. At the heart of this paradigm was the concept of learning language -- indeed, of learning all subjects -- not by learning about those subjects, but by putting the content to

authentic use. The whole language paradigm framed the notion of a thematic blending of subjects, with language being used in authentic ways across the curriculum. Student-generated questions and concerns enabled the "children's own purposes [to drive] their study" (Edelsky et al., p. 102) and thereby had the potential to transform the curriculum from teacher-directed and owned to student-directed and owned. Open-ended questions supported group inquiry and research in a cooperative and collaborative manner, and educating for social responsibility and action seemed to be a natural connection to the real life purposes of the communication arts so greatly urged within the whole language paradigm. Finally, the cyclic nature of thematic studies within such a framework had the potential of making group inquiry and social action ongoing curricular practices rather than sporadic breaks from the monotony of "the regular curriculum."

Employing theme cycles seemed a viable entry point for the limited practice of outcome-based instructional methods. Ordinarily, the adoption of this type of practice might have been out of the question, given the confines of calendars and report card deadlines, and given the time-consuming task of developing multiple test forms for students who needed additional time to master the required skills (Joyce & Weil, 1986). However, Bodemuller (1990) developed a means of enabling student inquiry groups to present their findings to their classmates in such a manner that repetitive presentations, when necessary, were possible without consuming inordinate amounts of teacher preparation time. Additionally, by utilizing the "incomplete" report card option on a limited basis, it would be possible to give some students an extended time frame if sufficient mastery was not forthcoming in an initial student presentation. Moreover, outcome-based assessment appeared to

support efforts to help students view their success or failure as a result of their own personal effort rather than of luck, since poor presentations did not lead to an irrevocable failing grade but to a second chance to improve if students worked hard to correct prior shortcomings.

Description of Selected Solution

The whole language paradigm provided a very appealing foundation for developing an inclusive strategy designed to eliminate academic apathy. Within this framework, it was possible to incorporate two core methods that supported the use of subjects, rather than their mere study: Group Investigation and educating for social responsibility.

At the heart of Group Investigation were the student questions and concerns that drove the course of study in a cooperative learning base. This made the course of study student-driven and enabled the desire to learn to spring forth from within the children, instead of being forced upon the children in an extrinsic manner. The need for extrinsic rewards was thereby diminished. The social responsibility and action component offered students an opportunity to apply what they were learning to the solution of real world issues of concern to the children, and feelings of empowerment through social action could thereby become another intrinsic reward for students' efforts. In this manner, one could not help but operationalize the concept of knowledge-in-use as the ultimate application of knowledge spilled beyond the classroom walls. The teachers at the writer's school were dissatisfied with an over-reliance on coupons, field trips, and other extrinsic lures dangled in front of their students in order to entice the children to do the assigned work. Through the coupling of group inquiry and social action, two intrinsic motivators would able to replace the extrinsic assortment in common use.

The district-sanctioned interdisciplinary unit design approach practiced by most teachers in the writer's school started with separate subject area skills clustered around a theme, with no overarching question or exhibition to extend the theme beyond simple subject correlations. Beane (1990) and others (George et al., 1991; Lounsbury, 1991) adamantly supported the notion that the middle school curriculum needed to be something more. How, then, might the design of interdisciplinary thematic units of inquiry and social action be effected? Wiggins, in 1987, suggested that knowledge-in-use might best be brought to fruition by a process called "backwards curriculum design" (p. 5), with open-ended questions and a knowledge of the final student exhibition becoming the foundation of the curriculum, and with specific skills serving the established, overarching purpose of the unit. A detailed method of blending backwards curriculum design with state and district skill requirements had already been developed and successfully piloted by this writer and two colleagues on a limited basis (Bodemuller & Friedman, 1989; Bodemuller, Friedman, & Kimmich, 1988; Friedman, 1990a) in conjunction with some of the school's early attempts to implement select principles of the Coalition of Essential Schools. Because this method contained the district skills and state frameworks of concern to teachers in the writer's school, while also maintaining an integrated theme, open-ended questions, and a rigorous final exhibition, it seemed a viable starting point for developing units of substance and purpose. This design approach appeared able to be repeatedly implemented in a thematic cycle format.

To address the concerns of collegues who might fear too great a departure from the mandated curriculum, the writer decided to incorporate the generative learning process of Woodbridge (1986) as adapted by

Bodemuller (1990). Generative learning was a structured brainstorming process, where students would be asked to survey two or more textbooks for the purpose of listing broad topics from two or more subject areas. The teacher then provided the main categories under which the topics might be classified, and the students would sort and classify the topics they had generated, using the teacher's overarching structure. This allowed the students to generate topics and questions, while still enabling the teacher to maintain control over the general, required content. If teachers applied this process to broad topics from their integrated content areas, a core of thematic entry points could be developed out of the required state frameworks. Those entry points would reorganize the required topics of study around general themes similar to those recommended by George et al. (1992). One theme would follow the other, so that thematic studies would be ongoing.

Ideally, the writer wanted to implement a form of outcome-based instruction capable of freeing teachers and students from the confines of arbitrary report card calendar deadlines, so that mastery could take precedence over timelines. Although altering district policies lay beyond the scope of this practicum, it was feasable to use a modified form of outcome-based instruction that could be employed in relation to the exhibitions of knowledge marking the end of each theme cycle. Students who had not performed in a satisfactory manner could be given an opportunity to redo their exhibitions. In this way, teachers would not have to devise new exhibitions, nor would district policies need to be waived. The few students in need of time beyond a traditional marking period deadline could receive an "incomplete" on a temporary basis, thus giving the students up to a four-week extension, when necessary. Despite the four-week limit on extensions,

and despite the necessity of closing out all grades at the end of the school year, this additional leeway for students had the potential to increase their chances for ultimate success. Furthermore, this practice seemed capable of establishing effort as a viable means for student achievement, thereby replacing the attribution of luck sometimes associated with one-shot opportunities.

What of skills that might still need to be directly taught? What about required aspects of the curriculum that did not seem to fit within a thematic context, but were still considered too vital to omit? Since the curriculum was to be rearranged but not completely restructured within the scope of this practicum, the writer felt it would be necessary to make some provision for the direct teaching that might occur even when thematic units of inquiry and social action were under implementation. The writer decided that a multisensory approach to such required curriculum elements, as recommended by numerous educators in the literature review of solutions, would be a viable way to meet this need. A multisensory approach to content delivery, when necessary, could help teachers connect with the creative and affective nature of the child, thereby providing a third intrinsic connection between the children and the subject matter.

The writer hoped to actualize Bodemuller's (1990) momentum of joy, born of intrinsic pursuits and sustained by the satisfaction of the inner needs of students. The three elements of inquiry, social action, and multisensory lessons, by corresponding to the four sources of intrinsic motivation described by Lepper and Hodell (1989), seemed to be a viable means toward this actualization. *Challenge* and *curiosity* would be addressed through the activity of Group Investigation, and the generation of student input through

the inquiry process could meet the children's need for more *control* over their own learning. Too, the self-actualizing nature of social action appeared to have the potential to provide additional outlets that challenged students and necessitated autonomous control of one's own thoughts and actions. Finally, multisensory approaches to the teaching of content seemed to offer rich avenues enabling the *fantasy* and wonder within each child to be broached. If the majority of a student's education could be delivered using a sustained momentum of such intrinsic incentives, then students might develop and maintain an inner desire to learn, replacing apathy with empowerment and joy. In that way, the writer hoped that disinterest toward academic work would disappear, along with the need for external motivators.

Report of Action Taken

Step One: Gathering Participants

Three weeks prior to the initial series of teacher-training workshops, the writer distributed a flier inviting the teachers at her school to participate in a pilot project replacing extrinsic motivators with intrinsic motivators in order to eliminate apathy toward academics. These teachers would form a core group of "Teacher Researchers Making a Difference" (see Appendix G for a sample flier).

Step Two: Initial Teacher Training Workshops

Two four-hour workshops were scheduled in order to introduce the participating teachers to the concepts of Group Investigation, social action, and backwards curriculum design. The writer planned the workshops and developed handouts prior to each presentation.

First Workshop: Experiencing Joy in the Classroom

During this first workshop, participants worked in cooperative dyads, with each dyad taking a section of the Florida Power and Light (FPL) pamphlet entitled The West Indian Manatee in Florida (Van Meeter, 1989). Each dyad shared information on different topics, including a description of manatees, their evolution, habitat, physiology, and economic importance. After this initial knowledge base was gathered, all participants scanned the mortality problems related to the manatee population and outlined "what could be done" as suggested in the FPL booklet. Additional information from a pamphlet published by the Save the Manatee Club (1992) and a book entitled Protecting Paradise (Cavanaugh & Spontak, 1992) helped to elicit a wide variety of ideas for possible action that teachers and their students could take in order to protect manatees. The Kids Guide to Social Action (Lewis, 1991) was also utilized as a resource for ideas related to petition- and letter-writing, and teachers were referred to Berman's (1990) article "Educating for Social Responsibility" as a pedagogical rationale for experiencing joy in the classroom through social responsibility that empowers students to have an effect on real-life issues and concerns. Another resource entitled Save the Earth: An Action Handbook for Kids (Miles, 1991) was used to uncover additional issues that might spark student social action.

By choosing this workshop format, the writer was able to model the process of group inquiry and offer teachers direct experience in using a knowledge-gathering/solution-generating lesson format in the classroom -- one applicable to any topic or issue students might choose to act on, once they investigated the background of the problem and what had been tried before. This workshop, as well as the handout developed by the writer for

distribution to participaing teachers (see Appendix H), expanded and updated ideas from Bodemuller's (1990) presentation at the Winter Symposium of the Coalition of Essential Schools.

Second Workshop: Planning Learning Experiences so that the Whole is Greater than the Sum of Its Parts

Two weeks after the first workshop was implemented, the second workshop was held. The writer began by leading a discussion based upon the essential question: "How can 'the same' knowledge be actively used, instead of just being passively acquired?" The objective of this discussion was not to reach a conclusive answer, but rather to initially clarify the perceptions of those attending the workshop, and to pave the way for the ongoing updating of participants' perceptions as they gained more knowledge and experience. Participants were the taken through the backwards curriculum design process, an adapted synthesis of ideas from Wiggins (1987) and from subsequent school-based curriculum design processes evolved by the writer and her colleagues (Bodemuller & Friedman, 1988; Bodemuller, Friedman, and Kimmich, 1989; Friedman, 1990a). After the writer distributed a handout she developed to explain the backwards curriculum design process to workshop attendees (see Appendix I), participants had an opportunity to begin brainstorming and identifying general topics to synthesize into their first unit for student investigation. The writer also started to help individual planners with the process as questions arose, and supplemental information about Group Investigation (Sharan & Sharan, 1989-1990) was also provided.

Unfortunately, time did not permit the participants to proceed much beyond the first three steps in the backwards curriculum design process. Originally scheduled for four hours, this workshop had to be concluded after

three hours due to the unanticipated early closing of the building in which the workshop was being held. It was decided that more time for applying the backwards curriculum design process was needed and would be allotted during the first mini-workshop scheduled four weeks later. In the mean time, the writer contacted each participant by telephone after the workshop, so that she could clarify confusions and encourage teachers to do some backwards curriculum design on their own. Because these initial workshops were held during summer break, follow-up contact by telephone spanned a three-week period which allowed for the out-of-town traveling variables of both the writer and the participants. During the follow-up conversations, the writer found that most participants either did minimal additional curriculum planning, or they needed more coaching in the design process. All participants said that they needed more time.

Step Three: Mini-Workshops

Two two-hour mini-workshops were scheduled in order to reinforce the process of backwards curriculum design; discuss ways to apply principles of outcome-based instruction; and to become acquainted with teaching strategies that were, in and of themselves, intrinsically motivating to students.

First Mini-Workshop: Curriculum Design and the Inner Desire to Achieve

The first mini-workshop was more of a round-table discussion than a forum for directly disseminating information. The majority of this mini-workshop focused upon a review and discussion of concepts related to backwards curriculum design. The ten steps of the process were again explicated, and some participants shared ideas for units that were beginning

to emerge as a result of the workshops and the independent initiative on the part of some of the teachers. Four teachers asked the writer to meet with them at some point during the preliminary planning days prior to the opening of school, and the writer made plans to do so.

The last half hour of the workshop was devoted to a discussion of how outcome-based instruction could increase one's inner desire to achieve, and whether the core concepts of outcome-based instruction could be implemented despite rigid marking period delineations and the formal requirement of assigning numerical and letter grades. Ideas from the article, "'If at first . . .' Attribution Theory in the Classroom" by Hunter and Barker (1987), were used as a focal point. No conclusions were reached by the workshop participants, but all agreed that outcome-based instruction and attribution theory were worth considering and discussing at the next mini-workshop.

During follow-up phone conversations a week after the first mini-workshop was held, the writer learned that three additional participants were in need of additional coaching in the process of backwards curiculum design, bringing the total to seven (out of ten participants). The necessity of finding time for such coaching was beginning to become pressing and pervasive.

Second Mini-Workshop: Confluent Strategies From Waldorf Education

The unforseen advent of a major hurricane lopped off one of the four pre-planning days prior to the start of the new school year. Because of this factor, the fourth mini-workshop, if it was to be scheduled at all, had to be held as a "working lunch." First, the writer gave an overview of intrinsic, holistic strategies from Waldorf education, having gained that knowledge

from a trip she had taken to Rudolf Steiner College in Fair Oaks, California during the previous month. The writer had planned the trip for the purpose of learning, firsthand, teaching methods for middle school students -- methods that stressed the blending of thinking, feeling, and willing, thereby making connections with the inner feelings and motivations of students. Numerous ways of integrating art, music, and literature into subjects like science, mathematics, and social studies were shown. Also presented were suggestions for combining subjects into interdisciplinary formats, such as math with business, or geography with social studies (see Appendix J for the handout the writer developed to detail the Waldorf-based strategies described in the workshop). Information was also imparted from two articles in Educational Leadership: "Learning That Grows With The Learner: An Introduction to Waldorf Education" (Barnes, 1991) and "How the Waldorf Approach Changed a Difficult Class" (Mollet, 1991).

For the last half hour, participants switched gears, and the writer facilitated an interactive exercise in generating alternatives, possibilities, and choices (de Bono, 1985) teachers might consider in trying to avoid assigning a grade of "F" to a student who has not shown adequate achievement in a subject under study. The "alternatives, possibilities, and choices" activity, or APC as de Bono calls it, is one of an extensive series of thinking exercises designed for application to real-life dilemmas and concerns. The writer found it appropriate and effective to use the APC in this context. Participants generated alternatives like having the students make subsequent corrections on a test, or offering a multiple choice format that included a "not yet" option to be completed at a later date. The writer wanted the alternatives to come from the teachers, so that they would have more ownership in the notion

that grades did not necessarily need to be tied to rigid timelines or one-shot testing situations.

At the end of the workshop, the writer reviewed the preliminary student and teacher checklists scheduled to be filled out within the next two weeks. Each teacher agreed to target one class of students in order to survey student attitudes and to track the students' grades and behavior during the lesson implementation phase of the writer's practicum. Workshop participants also agreed on a regular day and time prior to school (Wednesdays, 8:00 A. M. to 8:30 A. M.) for the subsequent collegial conversations that were to be planned throughout the rest of the implementation period.

An informal follow-up with participants, in the form of brief hall conversations the week following the second mini-workshop, indicated confidence in the summer training the teachers had received, as well as a willingness to experiment with new ideas. The writer formally scheduled ten collegial conversations on her school's master calendar, generally spacing each conversation two weeks apart. In total, these conversations spanned a time period from September, 1992 through mid-February of the following year.

Step Four: Collecting Initial Data

All participating teachers completed the Teacher's Observational Checklist of "Engaged" and "Respectful" Student Behaviors (see Appendix D), and all participating students completed the Student Questionnaire (see Appendix F). Since two teachers shared the same students at different times of the day, it was only necessary for one of those teachers to administer the Student Questionnarie.

Step Five: Applying Thematic Units and Intrinsic Strategies in the Classroom

For the next five and one half months, participating teachers were expected to develop and implement interdisciplinary units with social responsibility components and to apply intrinsically-motivating strategies in their classrooms. Each participant had targeted one class, and that was the class in which the teachers were asked to try out the new strategies; utilizing the new strategies in other classes throughout each teacher's day was optional, although most followed the latter approach. Once every two weeks, the writer requested that each participating teacher complete a Lesson Outline form (see Appendix B). This brief but regular obligation was designed to help keep the participating teachers cognizant of their lessons in relation to what they had learned in the workshops and what they would learn in the collegial conversations.

Step Six: Ongoing Collegial Conversations

The writer scheduled a total of ten collegial conversations over five and one half months. Because of the heavy meeting schedule during the regular day at the writer's school, each conversation began one half hour before the start of the official school day. Sometimes, when formal school meetings were not scheduled, the conversations lasted well beyond the original half hour of designated time. The conversations were initially scheduled solely as the writer's vehicle for the further dissemination of information about multisensory strategies and as an opportunity for problem-solving and the sharing of success stories, but the conversations almost immediately became a forum for participants to share methods they had learned or invented. The writer encouraged this type of sharing, in an effort to model her own recommendations of teacher flexibility and of student

ownership as cornerstones of nurturing intrinsic motivation, as long as the presentations were related to the basic framework of authentic and interdisicplinary curricula, multisensory strategies, social responsibility, and intrinsic motivation. Thus, the writer applied the notion of generative learning (Bodemuller, 1990; Woodbridge, 1986) to provide structure and focus for each conversation agenda, but the content varied according to the participants' concerns and their willingness to share.

First Collegial Conversation

At the first collegial conversation, the writer began by explaining how to complete the Lesson Outline form, and the teachers were encouraged to complete the first form at the converstion in order to minimize the extra time that would be required of the participants. Originally, the writer had planned to have the teachers fill out the first Lesson Outline over the summer, but time constraints did not enable teachers to get up to actual lesson-planning in the backwards curriculum design process, and the writer felt that the form, itself, should be introduced with time for any questions from the participants. There were questions, especially related to what the writer meant by "real-world" activities (those that connected to students' living experiences, instead of remaining summarized or abstracted in textbooks or on worksheets). Participants also wanted to be reassured that the lesson outlines could be brief, and they received this confirmation from the writer.

During the last part of the conversation, one of the participants presented his ideas for a "positive revolution" in discipline, based upon his reading of Edward de Bono's (1992) Handbook for the Positive Revolution. This participant agreed with de Bono that violence and destruction were not

effective means of eliminating negative behaviors in others, preferring to emphasize de Bono's five principles of effectiveness, a constructive outlook, respect, self-improvement, and contribution as a better discipline framework than punishments, rewards, and angry disapproval of student actions. The other teachers seemed interested in learning more, but the time allotted for the conversation was over, so this teacher was put on the agenda for the next conversation scheduled two weeks later.

Second Collegial Conversation

The participant interested in applying de Bono's (1992) positive revolution to student discipline started the second collegial conversation. He explained that students should not be attacked or criticized if they do something wrong; rather, they should learn to perceive the effects of their behavior on other people. The participant further urged the teachers to model respect toward students and toward adults, and to direct students toward their own self-improvement as opposed to the teacher's exerting control over the students. Here was an intrinsic foundation to a discipline plan that meshed well with the writer's curriculum concerns. Unfortunately, the participant's presentation served an informative purpose only; because it was outside the scope of this practicum, pursuit of this worthwhile avenue would need to take place outside the time set aside for the collegial conversations related to the writer's project. The writer expressed the hope that some participants would apply concepts in the positive revolution to their own discipline plans.

During the second half of this conversation time, teachers were encouraged to fill out the second Lesson Outline form while orally sharing some of their lesson ideas with the group. The writer had reviewed the first

Lesson Outline forms and had found that many participants did not seem to be aware of the expanse of options at their disposal. As the second lesson ideas were shared orally, the writer made a mental note that the teachers appeared to be progressing along a continuum. They did not all suddenly go from extrinsic to intrinsic classroom approaches, or from textbook to real-life connections overnight. This surprised the writer, who had expected that after more than three months of workshops and conversations, along with almost a month of student contact, these transformations would have already occurred. The conversations were wonderful vehicles for networking and support, but the teachers did not seem to be uniformly progressing as quickly as the writer had envisioned.

Third Collegial Conversation

This conversation started with a presentation by another participant, detailing numerous strategies she had learned from a workshop she had attended over the summer, entitled, "The 'Arts' in Language Arts: Practical Classroom Connections." The participant demonstrated how poems and stories could be illustrated so that the visual impact could enhance the verbal meaning. She described lessons that would ask students to write their interpretation of and reaction to various works of art. In one activity, the participant described how students would be shown the figures in a painting, minus the background, and the students would be asked to describe the settings they thought the painter might have drawn. After the descriptions were written and shared, the real paintings would be shown to the students, and reaction along with discussion would ensue. The participant's ideas were gained from Barbara Freiberg of the University Laboratory School at Louisana

State University in Baton Rouge, and the workshop was sponsored by Holt, Rinehart, and Winston.

Toward the end of the conversation, the writer shared information from an article by Jodi Dean and Ila Gross (1992) entitled "Teaching Basic Skills Through Art and Music." Several participants wanted to learn more about extending the arts into the basic skills of all subject areas, and the writer agreed to call LEAP (Learning through an Expanded Arts Program) in New York City for more information. As a result of the writer's phone call, Ila Gross agreed to conduct a workshop at the writer's school; the writer's principal agreed to fund this two-day presentation.

Fourth Collegial Conversation

Because some participants were lax in completing lesson outlines, and because the outlines that were handed in suggested the need for further reiteration of the central themes of the writer's practicum (intrinsic / multisensory strategies, interdisciplinary curricula, real-life lesson connections, and social responsibility activities), the writer's agenda was designed as a recapitulation of the participants' cumulative experiences thus far. Therefore, the agenda included a participative brainstorming of intrinsic strategies in each participant's "bag of tricks;" as well as a second brainstorming of ways students could use their knowledge for practical, real-world applicatons. Time ran out in the middle of the real-world brainstorming activity. However, this form of "facilitated conversational interaction," (a term coined by the writer and based upon a method adapted from the writer's training as a district facilitator for school conversations sponsored by the Coalition of Essential Schools), had an exhilarating effect on the teachers, who found it difficult to end this conversation even though they

had other meetings to attend. Subsequent feedback from several participants indicated that the teachers liked sharing with and learning from each other in this informal, interactive manner. The writer hoped that the lists created by the participants (see Appendix K) would serve as a catalyst for furthering the use of intrinsic strategies and activities that directly related to the real world.

The writer had scheduled weekly personal follow-up meetings with each teacher after every conversation, but time constraints intruded upon the regularity of such formal meetings. Informal meetings were more common and easier to implement, but the writer was not comfortable with that situation, because it meant that not every teacher would be seen with the desired degree of regularity. The writer followed up the fourth conversation with a personal visit to those who still needed to complete lesson outlines and, after their successful retrieval, the writer resolved to more vigorously make an effort to follow up each conversation with regular personal visits to each participating teacher.

After the fourth conversation, one of the participants requested one day of planning time with the writer and the school's computer specialist, in order to learn how her subject area could be reformatted into a more relevant curriculum with emphasis upon high technology. The writer's principal agreed to fund this endeavor, and so the requesting teacher received personal coaching in the entire backwards curriculum design process.

Fifth Collegial Conversation

Prior to this conversation, one of the participants approached the writer, asking if he could be put on the agenda to talk about his newly-formed "Thinking Club." The writer complied, and the teacher's presentation emphasized the importance of not just applying critical and creative thinking

to the subject matter, but of applying those skills to student behavior as well. That participant also urged the other teachers to present the content under study within the context of a total design, rather than in isolated fragments. The writer reiterated the need for meaningful informational contexts in relation to the research of Caine and Caine (1991).

The last part of the fifth collegial conversation was devoted to the collection of referral and suspension records, along with Lesson Outline forms and the "A" and "F" grades recorded for each targeted class at the end of the first marking period.

Sixth Collegial Conversation

The writer had been sharing the outcomes of each collegial conversation with her principal. As a result, the writer's principal asked if she would like to chair a committee to investigate the formation of one or more charter schools within the writer's school as part of the district's accountability initiative, and the writer agreed to take on that challenge. The principal suggested that some ideas for possible charter schools might emerge from the writer's Teachers as Researchers group. Because of this request, the sixth collegial conversation began with a discussion about the possibility of creating charter schools at the writer's work site based upon ideas explored by the Teachers as Reserachers. Participants found the notion intriguing, but they requested additional time to think further about the possibilities. Since this particular conversation preceded a long Thanksgiving weekend, the discussion ended with consensus that further thought would be given to the idea of forming one or more charter schools based upon the principles and practices of the Teachers as Researchers.

Seventh Collegial Conversation

Another colleague in the writer's Teachers as Researchers group was the focus of the agenda for the seventh collegial conversation. During one of the sporadic formal oral interviews, the writer not only learned firsthand of a myriad of multisensory activities used by this particular teacher to teach science, but the writer also saw the projects firsthand: captured on video and displayed around the room.

The presentation centered around the teaching of science skills that might normally be boring if presented through the mode of textbooks and workbooks alone. This teacher preferred to present the required curriculum through student-produced slide exhibitions (made from transparencies and reusable slide frames), three-dimensional models (like her cell model displayed as a pizza and subsequently eaten), and games created by the students to teach scientific facts and concepts to others. In addition, this teacher emphasized that her students were also learning how to write effective directions to others in a real-life context; they received plenty of negative and immediate feedback when games they created were unusable because their directions lacked clarity. This teacher suggested that flash cards ought to be the method of choice for teaching vocabulary. She relayed how students used textbooks, filmstrips, worksheets, and library resources as sources of facts for the creation of their games, and how students were also expected to work alone or in teams of two in order to construct three-dimensional models representing what they had learned. Ultimately, this teacher required her students to display and explain their models to the entire class in order to show that they fully understood the essential facts and concepts. Presentations could be in the form of plays, puppet shows, or songs.

This teacher's students worked from a menu of options, which allowed the children some flexibility and personal choice in their required classwork.

Eighth Collegial Conversation

Because midterms were approaching at the end of the month, the writer chose to begin the eighth conversation with a revisit to the notion of outcome-based instruction and attribution retraining as explicated by Raffini (1988) and by Hunter and Barker (1987). The writer shared the experience of one of the Teachers as Researchers not present that day. The teacher had failed two students at the end of the first marking period. However, she used those grades as flags that indicated a need to see why those students performed so poorly. She learned that one of the students was having problems at home, and she referred this child to Guidance for assistance. The other student had a learning disability that caused the traditional amount of assigned work to be so overwhelming that he would give up before he even tried. This teacher adjusted the child's work load, and he started completing his assignments. The teacher saw that this student was learning, and that the child was no longer intimidated into paralysis by what seemed, to him, to be an inordinate amount of work. Participants then discussed obstacles to and opportunities for applying attribution theory. The teachers concluded that part of their philosophy of education should be that "all children have the potential to succeed."

Despite the writer's firm resolve to regularly meet with each participating teacher in the weeks between each collegial conversation, the idea proved much more viable on paper than in reality, due to holidays, illness, and the obligations and commitments related to the participants' time at school. However, regular contact was maintained in the interceding weeks

through the mailbox distribution of meeting reminders; through the collection of Lesson Outline forms; through informal conversations; and through occasional, formal personal interviews. The writer found that she could use the Oral Interview Form in conjunction with the lessons described on the Lesson Outlines and during informal conversations, listing strategies and then determining whether they were intrinsically motivating. To that end, the writer found that some teachers were beginning to become more aware of the positive differences in their students' performance when multisensory and/or real-world activities were used. Other teachers voiced support of what was being said and shared in the workshops and conversations, but nevertheless did not seem to reflect this attitude in the strategies they reported using or in the lessons that they planned.

Ninth Collegial Conversation

The future direction of the Teachers as Researchers was the first agenda item, as participants were asked to think about whether the conversations ought to continue beyond the formal implementation of the writer's practicum. The teachers were unanimous in agreeing that the conversations should continue, but on a monthly rather than a biweekly basis. They also wanted to have more than one half hour for discussions, and it was recommended that the meeting day be changed from Wednesday to Monday, a day least likely to be encumbered by faculty or parent meetings.

Charter school possibilities were again considered, and some participants indicated that they might be interested in piloting the concept of the charter school experience, although the formal creation of a charter school was too extreme initially. The writer, as Chairperson of the House/Charter Schools Committee, asked the participants to consider forming informal

"working alliances" (Peters, 1992, p. 12) of groups of teachers interested in creating and implementing personal visions for education. The writer added the word "informal" because she felt that this type of structure supported innovative explorations without the pressure associated with formal declarations and charters. Informal working alliances could pave the way for future charter schools, but the interim step of the working alliances allowed teachers to explore and extend the Teachers as Researchers experience at a more realistic pace. Since the teachers were still in the process of developing integrated curricula with social responsibility activities, and since many were still becoming comfortable with multisensory teaching techniques, it seemed best to launch the creation of future charter schools through the vehicle of informal working alliances. The term, "informal working alliance" later evolved into "informal teaching alliance" because of its more direct connection with education.

Because practicum implementation was nearing completion, the writer followed up the ninth collegial conversation with personal reminders for lesson outlines and outstanding records of grades, referrals, and suspensions. Although time was at a premium, with midterms approaching, those in need of catching up assured the writer that she could count on them. As it later turned out, their assurances were backed up with action.

Tenth Collegial Conversation

The tenth collegial conversation was designed to put closure on the ideas and ideals explored by the Teachers as Researchers over the past eight months. First, the writer led a facilitated conversational interaction to discuss whether multisensory activities and social responsibility could be unified into a whole curriculum offering intrinsic connections for students on multiple

fronts. The impetus for this discussion was the writer's feeling, from reviewing the teachers' lesson outlines and from informal personal discussions, that "units" and "strategies" were still perceived as separate entities. The writer was hoping to facilitate a conceptual jump whereby interdiscipinary units and social responsibility activities might be seen as a framework within which to implement multisensory strategies. Most teachers, at this point, seemed to grasp and be excited about the positive differences in student performance effected by multisensory (and artful) teaching strategies. However, the context within which the information was presented still remained somewhat elusive, as separate activites were conducted without linkages to larger, overarching themes. This discussion led to the consensus that it was possible to merge artful strategies and social responsibility themes. In fact, three Teachers as Researchers decided to form an informal teaching alliance to create a mini-teaching environment emphasizing multisensory learning experiences, a positive discipline revolution, and thematic cycles of units integrating the core subject areas with community service.

The writer collected final Lesson Outline forms as well as referral/suspension information and data from the second marking period. Participants were informed that close-out interview forms would be distributed the following week. The tenth collegial conversation ended with the reminder that monthly conversations would begin shortly after the end of the formal implementation of the writer's practicum.

Step Seven: Ongoing Data Collection

At the end of each month of lesson implementation, starting with the end of August, 1992 and ending in mid-February, 1993, the writer requested,

from each teacher, the number of monthly referrals and suspensions received by students in the targeted classes. In addition, because the lesson implementation phase spanned two marking periods, the writer also asked each participating teacher to record the number of A's and F's earned by the students in each of the targeted classes during each marking period. Forms for data collection were distribited the week prior to scheduled collegial conversations, in order to give the teachers a chance to complete the information and return the data to the writer at the next meeting. Those unable to attend any particular conversation placed the completed forms in the writer's mailbox. In the few instances where responses were greatly delayed, a brief personal visit to the teacher in question enabled all requested data to be obtained.

Step Eight: Planning Additional Thematic Cycles

The writer originally hoped to facilitate the planning of ongoing thematic cycles of inquiry and social action by providing participants with the ability to apply the process of backwards curriculum design beyond the initial summer workshops. Because of budget cuts beyond the writer's control, there were limited monies to fund Temporary Duty Authorizations (TDA's) for the purpose of teacher planning while a substitute taught the teacher's students. These budget limitations were especially acute at the beginning of the school year. Eventually, one participant was able to meet with the writer, the computer specialist, and the Parent Advisory Chairperson for a collaborative curriculum planning session, and another participant was able to take a day to plan with the media specialist (who also attended the majority of the Teachers as Researchers conversations even though she did not teach any formal classes or participate in data collection). On the whole, however,

TDA's for interdisciplinary curriculum development were difficult to fund until January, and mid-year record keeping pressures kept teachers from seeking any additional work in the form of creating interdisciplinary units. Finally, in early February, the writer, three Teachers as Researchers, and two additional colleagues, were able to spend a day developing the framework for an interdisciplinary unit emphasizing "decency" as its overarching theme and incorporating a community service / social action component. One day was not enough for the entire unit to be formed, but the teachers had set down a foundation upon which to build not just one unit, but eventually an entire year of thematic cycles.

On the other hand, only 5 of the 11 Teachers as Researchers were able to take advantage of opportunities, during school time, to apply the backwards curriculum design process to the development of interdisciplinary, thematic units. Finding extended time for the other six teachers to do this type of detailed planning was still left to unresolved at the close of practicum implementation.

Step Nine: Final Data Collection

At the end of practicum implementation, all 11 participating teachers filled out the same checklist of observed collective student behaviors, as they had done at the start of the implementation period. Participating students again filled out the Student Questionnaire self-report. In addition, the writer distributed a final, personal interview form to each teacher, on which she asked the participants to describe what they felt they gained from the experience, how they thought the experience affected their students in terms of the presence or absence of apathy toward classwork, and to what extent each participant felt he or she learned new techniques for intrinsically

motivating students, for applying attribution theory, and for incorporating social responsibility into academic instruction. Each teacher was also given a cumulative list of 27 strategies presented during practicum implementation and was asked to indicate which strategies had been used as well as which were planned for use in the future (see Appendix M for the Closing Interview forms).

Deviations from Original Plan

The Elusive Element of Time

The deviations from the writer's original plan were indicated, above, in conjunction with the writer's Report of Action Taken. The most pervasive deviations resulted from the necessity to adjust time schedules, which invariably seemed more workable on paper than in reality. For example, it was relatively easy to schedule and get approval for the initial workshops conducted during summer vacation. However, shorter working hours for the custodians, as well as the time frames of participants who were teaching summer school, necessitated some time manipulation on the part of the writer. This problem was especially acute during the time of the second workshop, which was scheduled on Friday -- a day when the custodians left particularly early.

The cause-effect chain of this unforseen deviation led to successive additional deviations from the writer's original plan. The lack of time for the modeling and coaching of generative learning, the forerunner of curriculum integration and the foundation of interdisciplinary backwards curriculum design, meant that lesson-planning would be delayed until more planning time could be effected, and this meant that the completion of the first Lesson Outline form had to be delayed. This also meant that a portion of the first

mini-workshop had to be devoted to at least a recapitulation of the backwards curriculum design process, which encroached on the discussion time originally allotted for attribution theory and outcome-based instruction. When Hurricane Andrew took away a critical pre-planning day, the writer had to see how she could find additional time for the detailed coaching so necessary if interdisciplinary thematic units were to be developed in time for the start of the new school year. In order not to get "hung up" on curriculum design at the expense of classroom strategies, the writer chose to present some starter strategies and to generate some thought regarding outcome-based instruction during the fourth workshop; these topics seemed to be essential if teachers were to begin the school year with a global grasp of the entire practicum scope. The result, however, was a deficit in the implementation of planning for interdisciplinary thematic units, and this ultimately affected the frequency with which such units were developed and implemented by the participants.

Adjusting the Schedule of Biweekly Personal Interviews

The second major deviation in the writer's plans centered around the biweekly personal interviews originally intended for alternating weeks when collegial conversations were not held. At the beginning of the school year, the writer found it somewhat difficult to schedule an isolated time to meet with each of the 11 participants on a regular basis. By the middle of practicum implementation (and into the second month of the new school year), the writer felt that she needed to strengthen her resolve to personally visit each teacher on a biweekly basis. A schedule was written down, and the writer placed the meeting times on her daily calendar. However, at that point in the school year, the writer's job description made it necessary to meet with eight

teams of teachers on a weekly basis. These team meetings involved 9 of the 11 Teachers as Researchers in a different group situation.

On the one hand, the writer wanted to meet with each participant to further the conceptualizations of intrinsically-motivating activities and theme-based curricula. But, on the other hand, the writer feared that she might be imposing too often on the personal space of each participant, and she did not want to make her participants feel badgered, overpowered, or overwhelmed by too much close contact. (One teacher had already left the Teachers as Researchers prior to the start of the Lesson Implementation Phase because of time pressures.) Therefore, the writer decided to utilize the "Oral Interview Form" in its primary role as a tool for tracking the strategies participants were using to develop the intrinsic enjoyment of learning in their students, but to gather the data from the multiple sources of: (a) formal personal interviews, (b) informal discussions, and (c) descriptions of lessons on the Lesson Outline forms filled in by each Teacher as Researcher. The writer did not completely discard the use of the formal personal interview, because in visiting the teachers' rooms (which was not always the case during team meetings) the writer got a chance to discover interesting teaching practices that might not be readily apparent from the Lesson Outlines alone. Too, some of the teachers' presentations in the biweekly collegial conversations grew out of the writer's direct visits to participating teachers' classrooms. However, by not rigidly demanding that the participants meet with the writer on a regular basis as a Teacher as Researcher, the writer tried to maintain the relaxed rapport and open communication she desired in order to generate an intrinsic desire, on the part of the participants, to extend

applications in backwards curriculum design and multisensory strategies beyond the duration of the writer's practicum.

Toward More Flexible Conversational Agendas

The third major deviation in the writer's plans was related to the writer's perception of the purpose and format of the collegial conversations. The writer originally planned the conversations not simply as a networking vehicle, but primarily as a forum for her dissemination of a growing number of intrinsic teaching strategies. The writer planned this dissemination as a linear process: meet, share experiences, disseminate more strategies. As time went on, the writer began to view the conversations more as dynamic interplays of professional ideas, necessarily open to the variables of teacher preferences and school events, instead of open only to the writer's purpose independent of the personal needs of the other participants.

The writer had not planned presentations of the positive discipline revolution, or the artful teaching of language, or the multisensory approach to science instruction; nor had she anticipated the ideas put forth in relation to the "Thinking Club" or charter schools. Yet these deviations added a measure of empowerment and ownership to the conversations that seemed to validate the participants' reasons for attending, as much as it validated the writer's. In addition, the writer did not anticipate the energy sparked when she conducted the conversations in the form of "facilitated conversational interaction" rather than in the form of the linear dissemination of information from writer to participants. Much to the writer's (and the participants') delight, the writer found that the information she intended to disseminate could be interwoven with the participants' ideas. This deviation began in a very subtle and unplanned way, but it changed the writer's format

for the collegial conversations in that she began to use facilitated conversational interaction in the form of open-ended questions and brainstorming as a regular tool during the biweekly meetings, and she regularly scheduled participant presentations intermixed with presentations of her own. In addition, the conversation agendas were shaped by the writer's assessment of both the formal and informal interviews as well as the Lesson Outlines. The writer wanted to facilitate her staff development in an intrinsic way. Gravitating toward an open-ended and flexible conversation agenda seemed to be a natural evolution in the writer's deviation from her original plans.

Roadblocks and Difficulties

Chaos and the Time Factor

The theory of chaos (Gleick, 1988) seemed to be in full operation during the writer's practicum implementation. The writer made too many assumptions about time allocations based upon linear planning, neglecting to plan around the chaotic interplay of unanticipated factors and events that caused the element of time to spill its effects into other areas. Thus, the need to shorten the second workshop limited the amount of time for the collective coaching of the backwards curriculum design process, and this affected the underutilization of thematic cycles by the participants later on. Also, the lack of curriculum planning time combined with the scarcity of funding for TDA's compounded the underuse of interdisciplinary theme cycles as a force in intrinsically motivating students to learn.

Budget Realities and Constraints

When the writer envisioned the scheduling of TDA's for a more detailed coaching experience in the process of backwards curriculum design,

she did not anticipate the need to involve many more teachers than the 11 Teachers as Researchers. However, because backwards curriculum design was interdisciplinary in nature, funding a single TDA was not enough to produce the desired result, and the reality was that a minimum of two or three teachers needed to be included in the design of thematic, interdisciplinary units -- thereby doubling or even tripling the originally-anticipated cost of curriculum design coaching. The lack of in-school curriculum planning time was thus exacerbated by budget constraints, making it even more difficult to expect participants to design thematic cycles of units within the scope of the regular school day.

Attitudes, Paradigms, and Psychological Baggage

Attitudes are often hard to pinpoint because they have no material breadth or depth, and yet they seemed to hinder various aspects of practicum implementation in a number of ways. Because the writer was overly-cautious in her efforts not to unduly pressure the participants and wind up driving anyone out of the project, she felt compelled to alter her original plan to conduct regular personal interviews with each participant. Although data collection was not adversely affected by this alteration, the writer was left to wonder whether a little more assuredness on her part might not have resulted in some additional, personalized coaching for the participants.

A second attitudinal difficulty seemed to lie in the minds of some of the participants, weighted down by the old paradigms of scopes and sequences and single-content obligations that worked at odds with curriculum restructuring and content integration. For example, four Teachers as Researchers belonged to the same team, and yet each teacher, for the most part, designed units that were interdisciplinary in a content sense, but not in

the sense that those teachers got together to develop a general, overarching and discernable thematic whole. In all fairness, the writer must add that each teacher on that team was responsible for different subject blends and different grade levels; yet it was unfortunate that themes were not developed that might have spanned across content areas and grade levels as well. In another case, three Teachers as Researchers were on another team together, with two creating interdisciplinary thematic cycles while the third only occasionally found ways to relate her specific content to the other subject areas. While this teacher's use of multisensory activities was exemplary, students still worked on units in a chapter format. Recently, this has begun to change, as the third teacher has started to meet with the team in order to blend her content in a more integrated fashion. However, the writer cannot help but feel that old paradigms and practices delayed positive progress in at least some instances because of the need to unlearn entrenched habits and perspectives.

The writer also noticed that a small number of participants' hearts were "in the right place," yet they appeared unable to transcend constraints that caused them to remain outwardly rigid and structured while still inwardly yearning to be free of that structure. For example, in one of the writer's few backwards curriculum coaching experiences, the writer led the teachers in the curriculum design process. However, one particular Teacher as Researcher had a reason why most of what the writer was suggesting could not possibly work in her situation. Even after the planning day was over, that participant continued to find (or manufacture?) constraints that made the outcomes of the collective planning effort "impossible" to implement. From the writer's perspective, it seemed as though the difficulties expounded by this teacher came more from her personal problems than from any

constraints imposed by the school, the district, or the state. The writer could implement her workshops, curriculum coaching, collegial conversations, and personal interviews; but she could not remove stumbling blocks that seemed to stymie progress in paraticipants weighted down by excess emotional duress. Although beyond the writer's control, such "psychological baggage" nevertheless skewed the best intentions of both the writer and the participants.

The Scope of the Practicum

The writer suspects that the scope of her practicum might have stood in the way of the optmum implementation she desired. If she had concentrated only on interdisciplinary thematic units, or only on multisensory and intrinsically-motivating teaching strategies, or only on the integration of social responsibility and community service activities into the curriculum, she might have been able to effect more growth in any one area -- even though the other aspects of academic apathy would have been left unaddressed. The choice to use a more holistic strategy, even though possibly necessary for ultimate success, compounded the complexity of the writer's implementation strategy. Perhaps, if more time was allotted beyond the required eight-month implementation period, the use of interdisciplinary theme cycles and the integration of social responsibility activities would have equaled the utilization of multisensory and intrinsic teaching strategies that did seem to be steadily on the rise.

CHAPTER V

RESULTS, DISCUSSION AND RECOMMENDATIONS

The problem in the writer's school was one of academic apathy, where students were putting minimal effort into their assignments, performing poorly on academic tasks, behaving in inappropriate ways in the classroom, and generally lacking in an intrinsic desire to learn. The required content was not being presented by the teachers in a way that cultivated, in students, an inner motivation toward optimal performance and achievement.

The writer developed a two-tiered solution strategy consisting of a "teacher training" and a "lesson implementation" phase. The teacher training phase preceded the lesson implementation phase with two four-hour workshops and two two-hour workshops developed by the writer and presented to a total of 11 participating teachers. During the workshops, participants experienced a group inquiry lesson leading to social action, learned the steps involved in backwards curriculum design, discussed the application of outcome-based instruction within the writer's school, and acquired a foundation of intrinsically-motivating and multisensory teaching strategies with which to start the new school year, when the lesson implementation phase began. The teacher training phase continued with ten biweekly collegial conversations held concurrently during the lesson implementation phase in order to expand the participants' base of intrinsically-motivating teaching strategies, provide a networking forum where teachers could share ideas and implementation experiences, and expand conceptualizations introduced during the four initial workshops.

Results

First Objective

After practicum implementation, all participating teachers were expected to be able to create lessons that incorporated real-life concerns while still imparting essential content and skills, as demonstrated by the full completion (100 percent) of 10 lesson outlines that included a description of how the students were using their knowledge for practical, real-world applications. The first objective was only partially attained.

Each teacher completed 10 lesson outlines during the course of practicum implementation, as indicated in Table 1. However, Table 1 also shows that no participant was able to link all recorded lessons to immediate "real life" contexts 100 percent of the time.

Second Objective

After beginning a series of inservice workshops, and throughout the implementation of this practicum, all participating teachers were expected to be able to identify the specific teaching strategies that they were using to develop intrinsic enjoyment of learning in their students, as verified through the writer's biweekly oral interviews with each participating teacher, where each strategy named by the interviewees was to completely correspond (100 percent) to strategies presented to the participating teachers during an ongoing series of training sessions. The second objective was only partially attained.

Table 1

Number of Fully-Completed Lesson Outlines and "Real-Life" Activities -- By Teacher

Teacher	Completed Lesson Outlines	"Real Life" Activities
A	10	5
B	10	7
C	10	9
D	10	7
E	10	6
F	10	4
G	10	3
H	10	4
I	10	2
J	10	7
K	10	4

Table 2 depicts the frequency with which each participating teacher reported using the cumulative total of intrinsic strategies and also includes the number of reported lessons that utilized extrinsic strategies. Seven participants met the writer's expectation that no purely extrinsic strategies would be used during the course of practicum implementation. At the bottom of the table, the percentage of the frequency of intrinsic strategy use (as opposed to the use of purely extrinsic strategies) was calculated for each

participating teacher. Nine of the eleven participants utilized an intrinsic base of strategies more than 85 percent of the time. However, this figure still fell short of the writer's 100 percent goal.

Table 2

Frequency of Participants' Selection of Preferred Intrinsic Strategies

	Teacher										
Strategy	A	B	C	D	E	F	G	H	I	J	K
Dance/Movement	2	0	0	8	0	3	0	1	1	5	1
Creativity/Inventions	4	3	5	9	7	4	2	7	2	5	5
Puppetry	0	0	0	1	0	0	0	0	0	1	1
Fantasy	1	1	0	5	1	1	0	1	0	2	4
Music/Songs/Poetry	0	0	0	2	2	4	0	1	0	4	1
Art	5	3	1	5	5	3	2	4	1	3	4
Celebrations/Food	1	0	0	5	0	0	0	0	0	1	0
Drama/Role-Playing	2	0	0	2	2	3	2	1	2	2	2
Models/Multisensory	2	2	1	8	0	5	0	1	1	5	0
Student Presentations	2	2	2	6	2	2	0	1	0	2	1
Ownership/Inquiry	0	4	9	1	2	1	4	3	1	5	6
Social Responsibility	0	2	0	0	0	0	0	1	0	0	0
Extrinsics	0	0	0	0	0	0	11	1	6	0	3
Percent of Intrinsics	100	100	100	100	100	100	48	95	57	100	89

Third Objective

After the implementation period, all participating teachers, using a checklist of observed student behaviors, were expected to indicate both an increase in the intrinsic engagement of students and a decrease in negative behaviors, as verified by a gain of at least five "engaged" and "respectful" behavioral indicators checked off by each teacher, when compared with the number of "engaged" and "respectful" student behaviors observed at the beginning of the implementation period. The third objective was not fully attained.

As indicated in Table 3, only 3 of the 11 participating teachers reported a total gain of at least five "engaged" and "respectful" student behaviors during the implementation period. Another five teachers did report gains, but the number remained lower than the standard set by the writer. In three instances, teachers recorded a loss of positive behavioral indicators in their students over the duration of the writer's practicum.

Fourth Objective

At the end of practicum implementation, all participating students, in the classrooms of each participating teacher, were expected to exhibit at least a 50 percent decline in their defiant attitudes toward their peers, as indicated by monthly referral records kept by the participating teachers and by quarterly suspension records of participating students as determined by the administration. This objective was successfully attained, since the number of referrals was reduced by 50 percent, and the number of suspensions declined 100 percent.

Table 3

Results of Pre and Post Teacher Observations of "Engaged" and "Respectful" Student Behaviors

Teacher	Gain: "Engaged" Behaviors	Gain: "Respectful" Behaviors	Total Gain
A	4	1	5
B	4	1	5
C	0	1	1
D	5	3	8
E	2	-1	-1
F	-4	-3	-7
G	1	1	2
H	-1	-1	-2
I	0	1	1
J	2	0	2
K	-2	0	-2

Figure 1 illustrates the progression of the total number of monthly referrals for all participating students. During the month of December, a peak of four referrals was reached, followed by a 50 percent decline in January, and a drop off to zero for that portion of February still within the writer's practicum implementation period. The decline in the number of referrals is

summarized in Table 4. There were no referrals during the first five weeks or during the last five weeks of the lesson implementation phase. Referrals reached a peak in the month of December; however, the total number of referrals declined by 50 percent in the five weeks following that peak.

Figure 1. Progression of total number of monthly referrals for all participating students.

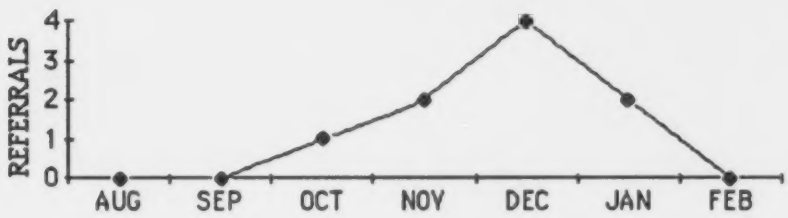

Table 4

Percent Decline in Monthly Referrals From Beginning to End of Practicum Implementation

First 5 Weeks	Last 5 Weeks	Peak Number	Total After Peak	% Decline
0	0	4	2	50

Figure 2 illustrates the progression of total monthly suspensions for all participating students, delineated by marking period. There were no suspensions in the first marking period, but two instances of suspensions were reported during marking period two. If one examines the total number of suspensions by month, one can see that the suspensions occurred in November and December, also the time of peak incidents of referrals (see Figure 1). Table 5 depicts the percent decline in monthly suspensions from the beginning to the end of practicum implementation. There were no student suspensions during the first five weeks or during the last five weeks of the lesson implementation phase. After the single suspensions in November and December, the total number of suspensions dropped down to zero, reflecting a 100 percent decline.

Figure 2. Progression of total number of monthly suspensions for all participating students.

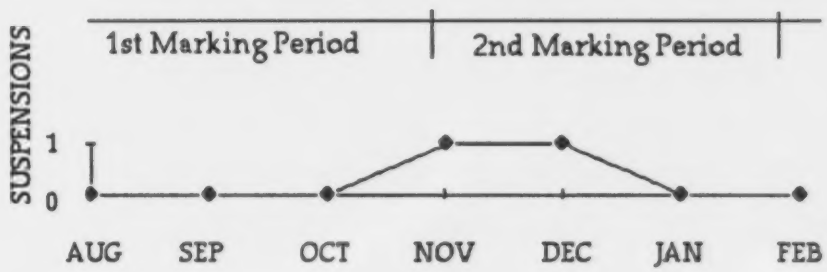

Table 5

Percent Decline in Suspensions From Beginning to End of Practicum Implementation

First 5 Weeks	Last 5 Weeks	Peak Number	Total After Peak	% Decline
0	0	1	0	100

Fifth Objective

At the end of practicum implementation, participating students were expected to exhibit a decline in the number of course failures in classes conducted by participating teachers, as indicated by the quarterly grades of each participating student, where the number of failures at the end of the second marking period would be at least 50 percent below the number of failures recorded at the end of the first marking period. This objective was only partially attained.

The results displayed in Table 6 indicate that the standard set by the writer was achieved by eight of the participating teachers. On the other hand, three teachers found it necessary to fail more students in the second marking period than in the first marking period.

Sixth Objective

At the end of practicum implementation, participating students were expected to exhibit an increase in the optimum quality of their classwork, as indicated by the quarterly grades of each participating student, where the

number of "A" grades at the end of the second marking period was expected to be at least 25 percent higher than the number of "A" grades recorded at the end of the first marking period. This objective was only partially attained.

Table 6

Difference in Number of Failing Grades Earned by Participating Students Between First and Second Marking Periods -- By Teacher

Teacher	Failures 1st Marking Pd.	Failures 2nd Marking Pd.	Total Difference	Percent Difference
A	2	3	+1	+50
B	0	0	0	0
C	0	0	0	0
D	0	0	0	0
E	0	0	0	0
F	0	0	0	0
G	0	2	+2	+200
H	0	0	0	0
I	0	1	+1	+100
J	0	0	0	0
K	0	0	0	0

Table 7 illustrates the percent increase or decrease in the number of "A" grades earned by the participating students of each teacher between the first and second marking periods. Only five teachers reached the standard expected by the writer. On the other hand, six teachers reported a loss in the number of "A" grades earned by students when comparing the results of the first and second marking periods.

Seventh Objective

At the end of practicum implementation, it was expected that participating students would exhibit an increase in feelings of intrinsically-motivated enthusiasm, empowerment, and joy in their learning eperiences, as measured by student self-reports in which the students would exhibit a mean gain of at least five positive attributes when compared with the results of the same self-report administered at the beginning of the implementation period. The standard for the seventh objective was not achieved.

As illustrated in Table 8, students showed mean gains in feelings of enthusiasm, empowerment, and joy in the classes of only four participating teachers, and those gains were well below the mean originally expected by the writer. On the other hand, students showed mean declines in the classes of six of the participating teachers. Results for Teacher K were not reported because this teacher shared the same students as Teacher J.

Table 7

Difference in Number of "A" Grades Earned by Participating Students Between First and Second Marking Periods -- By Teacher

Teacher	A's Earned 1st Marking Pd.	A's Earned 2nd Marking Pd.	Total Difference	Percent Difference
A	6	4	-2	-33.3
B	15	12	-3	-20
C	17	16	-1	-5.9
D	10	19	+9	+90
E	11	6	-5	-45
F	3	12	+9	+300
G	10	15	+5	+50
H	1	3	+2	+200
I	5	1	-4	-80
J	1	4	+3	+300
K	6	1	-5	-83

Table 8

Pre- vs. Post- Implementation Differences in Mean Number of Postitive Attributes Indicated by Students in Each Participating Teacher's Class

Teacher	Pre-Implementation Mean	Post Implementation Mean	Difference
A	12.5	13.8	+1.3
B	16.6	15.4	-1.2
C	13.6	13.1	-0.5
D	16.9	12.6	-0.5
E	14.7	13.1	1.6
F	16.7	12.5	-4.2
G	10.3	10.7	+0.4
H	10.3	10.6	+0.3
I	8.0	6.1	-1.9
J	14.3	17.2	+2.9

Discussion

For the first objective (see Table 1), the writer defined "real life" activities as tangible experiences in the students' personal lives or in the immediate scope of their present world outside the classroom. The writer chose not to view activities as related to "real life" if teachers could only offer a rationale for the future benefit of a given knowledge base, no matter how valid that rationalization might have been. The point in question was whether the students would be able to be immediately see and feel the usefulness and connectedness of that knowledge to something that mattered to them in an intrinsic sense. Just because a skill was necessary for a later study area, or necessary in order to pass a test, or even necessary in one's future life, did not make it automatically relevant to a student's personal life in the here and now. This difference affected the writer's interpretation of what she considered to be activities related to "real life," a persective shaped by the writings of Edelsky et al. (1991), Steiner (1988), and Wiggins (1987). Results suggest that the participating teachers' conceptualizations of "real life" activities did not completely correspond to that of the writer's. Because of the writer's subjective interpretation, none of the participating teachers were able to completely meet the established standard.

In order to obtain data for the second objective (see Table 2), the writer expanded her sources from which to obtain information about each teacher's selected strategies to include a combination of formal personal interviews, informal discussions with each participant, and the ten completed lesson outines, after it became evident that biweekly personal interviews with each participating teacher would not be able to be held with regularity. However, the writer continued to use the Oral Interview Form developed for the

purpose of recording and assessing strategy information (see Appendix C). The writer developed a cumulative list of strategies against which to assess whether identified strategies were either intrinsically or extrinsically based; the list included a combination of intrinsically-motivating strategies as recommended by Lepper and Hodel (1989), multisensory approaches to the learning process (Dean & Gross, 1992), lessons based upon elements in the inquiry process (Sharan & Sharan, 1989-1990), and assignments incorporating social responsibility (Berman, 1990). In addition, when recording participating teachers' activities, the writer sometimes indicated the use of multiple strategies. For example, one teacher had her students create and present their own bird habitats, which blended fantasy, art, movement, and student presentations. The writer viewed lessons like the bird habitat as a "slice" of the classroom experience that was then broken down into its component parts. On the other hand, the writer only recorded a strategy as extrinsic if the teacher's entire lesson appeared to consist of reliance on worksheets, chapters, or teacher-controlled discussions with no noted intrinsic entry points, enhancements, or follow-throughs. Although the writer's original standard for the second objective was not completely achieved, she felt that perhaps nine of the teachers had attained enough intrinsic momentum (Bodemuller, 1990) to offset the cumulative, negative effect on student academic attitudes that can result from an over-reliance on strategies where the teacher "gives" students a "dose" of content and expects the children to "swallow" that content with a bit of extrinsic force from the teacher.

Results of the third objective (see Table 3) might have been adversely affected by the forced choice format, with which some teachers expressed

discomfort. The writer deliberately chose a yes/no structure because she wanted the positive indicators to be definite and prevalent -- not occasionally exhibited by only some students. Indeed, the laws of chaos (Gleick, 1988) also appeared to affect the outcome of this objective. For example, teacher H had recently and repeatedly expressed a desire to change her teaching assignment the following year, and this feeling was coupled with the extreme pressure this same teacher was under to meet the deadline for submitting the yearbook components for publication. Some of this teacher's observations might have been colored by the negative feelings emanating from forces beyond the writer's control.

Referral (see Table 4) and suspension (see Table 5) figures for the fourth objective were obtained only for the targeted class of each participating teacher. The writer asked that each participating teacher only report referrals resulting from incidents inside the teacher's targeted classroom and that suspensions be reported only if the incident resulting in suspension occurred in a teacher's targeted class. Referrals and suspensions of students outside the targeted class, even if they involved the students of participating teachers, were not tracked for the purposes of this practicum.

As evidenced by Figures 1 and 2, the peak in disruptive behavior occurred during the holiday season prior to winter break. It is, therefore, difficult to tell whether the increased incidence in disruptive behavior at that time was triggered by student disinterest or by the general excitement of the season coupled with the eating of too much holiday candy. In addition, the writer had originally hoped to establish more of a direct relationship between the intrinsic teaching strategies used by participating teachers and a decline in disruptive behavior. However, because the first and second objectives were

only paratially attained, the successful decline in referrals and suspensions of participating students suggests, at best, only a cautionary link between an intrinsically-motivating course of study and improved student behavior.

The writer's purpose for including the fifth objective was to reflect the progress teachers were making in using the ideas of attribution theory (Hunter & Barker, 1987) and outcome-based instruction (Raffini, 1988). It was the writer's hope that participating teachers would be able to offer positive encouragement for students, without the threat of failure due to arbitrary time constraints on the assigning of grades. Results suggest that attribution theory and outcome-based instruction were not being applied by all teachers, as indicated by the presence of "F" grades on students' report cards (see Table 6). On the other hand, one must not assume that an absence of F's indicated that the ideals of outcome-based instruction were being used. Results also suggest that repeated discussions about outcome-based instruction, conducted by the writer at workshops and conversations alike, were not necessarily enough to influence some teachers, at that point in time, to suspend the final decree of "failure" and record a temporary "incomplete" when the end of the marking period demanded that grades be submitted. In all fairness, in the case of teacher G, the end of the semester meant a change in students, and this might have influenced that teacher's decision to assign grades of "F" instead of "incompletes" to be filled in later. However, teachers A and I continued to keep the same students for the rest of the school year, and the writer had hoped that the failing students of these two teachers might have been given additional time to master the material.

It is interesting that Teacher A, who chose to fail students in both marking periods, told the writer that she had used the failures of the first

marking period to adjust her teaching methods in a more personalized manner for the students in question. In the final interview, this teacher preceived herself as using the principles of outcome-based instruction to a great degree. Ironically, Teacher A's failure rate showed a 50 percent increase from the first to the second marking period. Perhaps this teacher's understanding of outcome-based instruction differed from the perceptions held by the writer, suggesting that semantic nuances might have affected the writer's efforts to effectively communicate with this teacher. Or, perhaps each participating teacher was simply progressing along an invisible "continuum" at his or her own rate. The gap between the writer's perceptions and those of the participants, brought out in the discussion of the results of the first objective, was surfacing anew. Such results suggested the possibility that ouctome-based instruction might be as applicable to the Teachers as Researchers as it was to their students, and that Sizer's (1985) concept of "unanxious expectation" (p. 227) needed to be cultivated by the writer as well as by the participating teachers.

In tracking the number of "A" grades assigned to students, the writer was disappointed about losses in optimum achievement as reflected by a decline in the number of top grades earned by students in the classes of six participating teachers (see Table 7). Gains and losses occurred across grade and ability levels as well as subject areas, and no discernable patterns that might have explained the decline in any of these contexts was noted by the writer. The assignment of grades can be very subjective, however, and once again the intrusion of chaos (Gleick, 1988) resulted in variables outside the writer's control. For example, some teachers used the first and last marking periods for review, preferring to present new concepts and ideas primarily during the

second and third marking periods. If students were engaged in more complex activities or if assignments were increasing in difficulty, students' grades would likely be affected. Since the writer did not track the exact grade point average for each participating student, it is difficult to determine the extend of academic improvement for each participating teacher's class as a whole; therefore, the results obtained must not be interpreted as a conclusive indication of declining academic interest or success.

Part of the disappointing results for the seventh objective might have stemmed from the way many of the questions were worded on the Student Questionnaire. The questions related to school in general, while the implications of the results were intended to be interpreted only in relation to specific teachers, and not to the school as a whole. This possibility again invited the interference of factors beyond the writer's control, such as the students' relationships with teachers outside the immediate circle of participants. Some students were assigned to some of the participating teachers only once each day, with the other five classes conducted by teachers not having the experiences provided through the Teachers as Researchers. Other students were assigned to the participating teachers only two hours out of six. No student remained with participating teachers for six class periods a day. The research of Deci and Ryan (1985) indicates that too much exposure to extrinsic methodologies can undermine the development of a more intrinsic orientation toward one's schoolwork. Thus, the "luck of the draw," in terms of which teachers elected to become involved in the writer's project, and which teachers were assigned to the students, might have inadvertently stalled the growth of joy and appreciation of learning in some students.

One might also consider the general outcome of the seventh objective in conjunction with objectives five and six. Perhaps as the work became harder -- not just in the classes of participating teachers, but in the classes of other teachers as well -- more intense demands on students resulted in declining overall feelings of enthusiasm and joy toward learning. It might then be inaccurate to conclude that the implementation of intrinsically-motivating strategies did not increase the students' positive feelings toward school; indeed, the efforts of the participating teachers may have kept some students' attitudes from deteriorating further.

Unanticipated Outcomes

Increased Teacher Empowerment

The writer conducted a closing interview with each participating teacher, in the form of a questionnaire that she asked each teacher to fill out. In the Plus, Minus, and Interesting (de Bono, 1986) exercise asking teachers to evaluate what they felt they had gained from their experiences as "Teachers as Researchers," the writer was surprised that the only negatives recorded by the participants were time-related, primarily in terms of not having enough time to meet, share, or learn as much as the teachers would have liked.

On the other hand, the participants overwhelmingly applauded the opportunities this practicum provided for continual networking and professional interaction. They applauded the regular sharing of ideas and strategies, urging the writer to continue monthly meetings after the end of her formal practicum implementation period. If one takes the advice of Deci and Ryan (1985) to heart and acknowledges that the development of student empowerment and intrinsically-motivated learning begins with the teacher, then this practicum might provide a foundation for overcoming student

apathy toward academics as the joy of the teacher spills over into student joy in the classroom. The comments of one of the participants seems to drive this possibility forward: "as my self-esteem went up, so did my positive attitude in the classroom. Modeling a 'can-do' attitude is a powerful role model!"

The Creation of Informal Teaching Alliances

In Liberation Management, Peters (1992) describes the concept of "working alliances" (p. 12), where two or more colleagues form a partnership to accomplish a given task and then dissolve the partnership when the work has been completed. In the spirit of these working alliances, the writer, as Chairperson of the House/Charter Schools Committee for her work site's School Improvement Plan, offered all teachers at her school an opportunity to form informal teaching alliances reflecting their own personal philosophies of education. Of the three alliances formed, two appeared firmly grounded in the ideals originally emphasized as part of the writer's practicum. One alliance was formed with the threefold goal of: (a) establishing decency (Sizer, 1985) as the cornerstone of its positive revolution (de Bono, 1991) in discipline; (b) furthering an interdisciplinary blend of content; and (c) requiring a community service component as part of each thematic cycle (Edelsky, Altwerger, and Flores, 1991) created using the process of backwards curriculum design (Bodemuller & Friedman, 1988; Bodemuller et al., 1989), Friedman, 1990a; Wiggins, 1987). The other alliance decided to extend the concept of using the arts to teach the core content areas (Dean & Gross, 1992), an outgrowth of the workshop conducted by Ila Gross at the request of the participating teachers. The writer had never anticipated that the major concepts underlying her practicum would be continued as a part of

the School Improvement Plan for the following school year -- at the teachers' request.

Respect for Chaos

The writer learned firsthand how factors beyond one's "Circle of Influence" (Covey, 1990) can affect intended outcomes in unexpected ways. First, the element of time was subject to the whims of custodians as well as the weather, shortening workshops and truncating the delivery of essential content to the participating teachers. Second, the myriad pressures of daily life made it imperative that participants place family illness, the death of a loved one, the break-up of a relationship, or selling and buying a home above the writer's "mundane" practicum concerns. Third, additional school responsibilities like coaching or the yearbook kept otherwise supportive participants from attending morning collegial conversations on a regular basis, and such extra obligations also kept some of the teachers inundated with additional work. There was also the problem of entrenched attitudes of rigidity or inflexability that kept at least one participant from being able to grasp the idea of interdisciplinary curricula or multisensory teaching strategies because that participant seemed subconsiously to create stumbling blocks to her own progress. The writer learned that she was not omnipotent and that she needed to allow for singular and unexpected parapets that stood not just in her own way, but in the way of individual participating teachers as well.

Unattained Objectives

The writer did not expect so many objectives to remain unattained. Part of the problem seemed to lie in the high expectations she had for teacher growth and for student gains. The hope that all participating teachers would

be able to link every lesson to real-life concerns, that all lessons for all teachers would utilize intrinsically-motivating strategies, and that all participating teachers would consistently assign more A's and fail fewer students during the second marking period -- within the span of an eight-month time frame -- left no leeway for outside factors that nevertheless exerted sobering effects upon the writer's intended outcomes. The writer was too idealistic in her exuberence for perfection; it was necessary for reality to temper this unbridled idealism and make it more compatible with the world as it was.

From the outset, the writer preferred to take an intrinsic approach when she worked with her colleagues, reflecting upon the recommendation of Deci and Ryan (1985) that if intrinsic motivation was to be cultivated in students, it needed to first become a driving force for the teachers. Participants volunteered to become involved in the writer's project, and they chose their teaching strategies (or invented new alternatives) from an ever-expanding array of options. The only firm requirements associated with participation were: (a) the completion of 10 Lesson Outline form, (b) the conducting of pre and post surveys on students, (c) the the completion of pre and post teacher questionnaires, and (d) the periodic reporting of student data related to grades and behavior. Although the writer was tempted to impose requirements on her teachers, such as choosing definite strategies from a menu of acceptable alternatives, choosing real-life subject matter connections based upon a set framework, developing a minimum of two thematic cycles using the process of backwards curriculum design, and writing a minimum number of explicit social responsibility activities into those units, she did not follow through with any of those rigid demands. The writer wanted the

participants to choose available options because they wanted to, not because they had to. She hoped that the encouragement and collegiality generated through the ongoing networking and information sessions would eventually lead to achievement of the desired outcomes.

The word "eventually" was the key. By the end of the implementation period:

1. Teacher D was calling the writer into that teacher's classroom to observe the students pasting leaf taxonomies using leaves the children had gathered and pooled together in cooperative groups. At that time, the writer also observed a mural of animal taxonomies that adorned one entire wall; these taxonomies consisted of pictures of animals, cut from assorted magazines, that were then sorted and arranged according to a variety of diverse criteria.

2. Teacher D was also participating with teachers B and C in the development of her first interdisciplinary unit of the year, even though the other two teachers had written two previous theme cycles without her willing participation. In addition, these three teachers were part of the informal teaching alliance focusing on decency and social responsibility.

3. Teacher A stopped the writer in the hallway just two weeks prior to the end of the implementation period, requesting more ideas for teaching mathematics through the use of multisensory strategies. She stated that she could not believe how well her students were understanding fractions after they experienced the "fraction quilts" activity presented by Ila Gross, LEAP consultant.

4. Teacher E teamed up with three other colleagues (not Teachers as Researchers) to form an informal working alliance that focused on integrating the arts into all content areas.

5. Teachers I, J, and K formed an informal teaching alliance with a behavioral focus; yet they were requesting time to meet with teachers B, C, and D in order to plan interdisciplinary activities that would incorporate more authentic and real-life activities in the context of community action and responsibility. Since teachers B, C, and D were part of the teaching alliance stressing social responsibility decency, the further evolvement of teachers I, J, and K was still possible.

In short, each teacher seemed to be evolving along a continuum at a pace that depended upon where every teacher started as well as factors that might have temporarily interfered with each participant's progress. The writer had shared a Whale Watch unit of social responsibility developed by teacher H early in the middle of the implementation period; however, by the end of implementation, yearbook pressures had interrupted this teacher's enthusiasm for anything that required an ounce of extra time. Personal difficulties outside of school affected teachers A and F in the middle of the implementation period, but these difficulties appeared to be abating as the final questionnaires were being filled out. The curriculum mindsets of teachers G, I, and K were predominantly rooted in chapters and in scopes and sequence charts; yet teachers I and K were beginning to toy with the idea of an occasional interdisciplinary interlude as exhibited by their planned interaction with teachers B, C, and D.

Perhaps eight months, although a relatively long period of time in terms of change with a behavioral focus, was not long enough from an

intrinsic perspective. The writer was trying to grow attitudes: attitudes of joy in relation to academic tasks, as well as attitudes reflecting an intrinsic desire to learn; and these attitudes needed to start with the teachers (Deci and Ryan, 1988). By the end of practicum implementation, this transformation in the teachers appeared to be in evidence; however, many changes were gradual rather than abrupt.

Summary of Results and Implications

The workshops and strategies did not seem to produce an expected and immediate improvement in students' attitudes toward academic tasks, as evidenced by records of student grades and by results from the Teacher's Observational Checklists and the Student Questionnaires. Incidents of referrals to the administration and suspensions from school did show a favorable decline, however, tentatively suggesting that the efforts of participating teachers were possibly beginning to effect a degree of positive change. The unexpected outcome of increased collegial cohesion and professional confidence among the participating teachers offered hope that the ongoing growth and development of more intrinsically-motivating class activities might continue.

A number of implications follow from the results of this practicum experience. First, chaotic factors like personal problems, pressures, and preconceived mindsets can adversely affect even the most sincere efforts to change one's approach to teaching and to rethinking the curriculum. Second, initial buy-in to a particular teaching approach, coupled with ongoing discussions about furthering one's professional practices in light of that approach, may not necessarily translate into immediately consistent application in the classroom. Third, teachers can renew an exuberance for

their profession when engaged in regular networking, the sharing of ideas, and the discovery of new strategies that spark at least a short-term boost in student engagement and interest in the subject matter. Finally, students may need exposure to "real-life" and multisensory strategies extended into the entire school day; a partial exposure to interdisciplinary curricula and holistic teaching may not be enough to offset the negative effects of a predominantly extrinsic approach to teaching and learning.

Recommendations

The writer offers the following recommendations, based upon the outcomes of this practicum:

1. Increased collegial networking and sharing give teachers greater opportunities for experiences that buoy their confidence and facilitate the growth of feelings of effectiveness and self-worth. This can provide a strong foundation upon which to rethink curriculum into an integrated structure and upon which to change classroom practices from a more extrinsic to a more intrinsic orientation.

2. The tenets of outcome-based instruction apply just as equally to staff development in holistic teaching strategies as they do to the conventional classroom. While it is important to hold high standards of attainment, it is equally important to merge this focus on ouctomes with Sizer's (1985) attitude of unanxious expectation. Assessing results at any point in time reflects the natural variance associated with individual teachers who start at different stages and progress at different rates. High ideals need not be compromised, as long as it is possible to maintain the confidence that such ideals can eventually be attained if teachers are supported in their efforts and if each teacher is allowed to proceed at his or her own pace.

3. Efforts to improve students' attitudes toward academic tasks and to increase students' inner desires to learn ought to encompass as broad a range of school experiences as possible. An intrinsic thread needs to be woven throughout a student's day, so that children will be less likely to be negatively affected by mixed messages that come to the fore when other parts of a child's day are spent in learning environments that limit inquiry and stress a heavy overabundance of teacher control.

The above recommendations will help to guide the writer and her colleagues as they continue expanding and extending the concept of holistic teaching strategies and a more integrated curriculum in the writer's work setting. Two informal teaching alliances will carry the underlying principles of the writer's practicum into the following school year. One alliance will focus on "Social Responsiblity and Decency" and one will focus on "Integrating the Arts in Teaching." Neither of these alliances is designed to force its ideals upon unwilling colleagues. But both alliances have been created with an "open enrollment" feature for future expansion: any interested colleague may join at any time. To date, eleven core teachers are actively working within these two alliances. In addition, both alliances have gained policy and fiscal support from the writer's principal and have become part of the Action Plan for School Improvement.

Dissemination

The writer has and will continue to share units and strategies implemented by her Teachers as Researchers as "best practices" at the monthly district-wide meetings of Middle School Generalists. However, these practices are shared in the form of a handout, and the writer has sought to widen the dissemination base in a more general and direct way. First, the

writer plans to be a presenter at her district's Spring Education Showcase, sponsored by the School Board, the teacher's union, and local parent support groups. The topic of the writer's presentation will be: "Emphasizing Academics With Joy: Using the Arts to Effect Optimum Student Learning." Second, the writer is now listed as a district Presenter offering to conduct workshops in backwards curriculum design and in the intrinsic aspects of Sizer's (1985) principle of *student as worker*. The writer has already received calls for her services and is currently scheduled to give a presentation on backwards curriculum design at an elementary school in the district. Third, at the request of Brown University in Providence, Rhode Island, the writer has submitted her name to be included on a nationally-disseminated "speakers and workshop leaders list" on the following topics: (a) Backwards Curriculum Design, (b) Designing Interdisciplinary Units of Social Responsibility and Joy, and (c) Making Intrinsic Connections by Engaging the Heart As Well As the Mind. The writer is ready to travel in order to effect the widest possible dissemination of her practicum and waits with "unanxious expectation" for additional opportunities to demonstrate ways in which teachers can follow a more intrinsic, holistic, and joyful path to educate their students.

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APPENDIX A

SCHOOL GOALS, 1992-1993

Appendix A

School Goals, 1992-1993

1. To implement a school-wide peer coaching program. By the end of the 1992-1993 school year, at least 50 percent of the staff will be involved in one of the four stages of a total peer coaching program as measured by records of participation.

2. To provide teachers the opportunity to reduce the student-teacher ratio by offering scheduling in two period/teacher/subject blocks.

3. To continue to explore flexible scheduling options in order to create oportuinities for increased academic enhancement.

4. To modify the existing curriculum to incorporate life/vocational skills (e.g., time management, goal-setting, study strategies, critical reading, applied mathematics, citizenship, consumerism, health/safety, etc.) by implementing at least two interdisciplinary units which will incorporate life skills.

*Permission to reprint the School Goals for 1992-1993 has been granted by the principal of the writer's school.

APPENDIX B

LESSON OUTLINE

Appendix B

Lesson Outline

Teacher _____ Date _____

1. Brief Description of Lesson:

2. Targeted Real-World Activities (How are the students using their knowledge for practical, real-world applications?)

3. Required General Content and Skills To Be Used In Completing the Above Activities:

General Content	Skills

APPENDIX C

STRATEGIES FOR DEVELOPING INTRINSIC ENJOYMENT OF LEARNING

Appendix C

Strategies Used To Develop Intrinsic Enjoyment Of Learning

(Oral Interview Form)

Teacher's Name _____ Date _____

Teaching Strategy Used To Develop Intrinsic Motivation (Described By Interviewee)	INTRINSIC Relates to Strategies Presented to Teachers	EXTRINSIC More Externally Controlled By Design

APPENDIX D

TEACHER'S OBSERVATIONAL CHECKLIST OF "ENGAGED" AND "RESPECTFUL" STUDENT BEHAVIORS (WITH TEMPLATE)

Appendix D

Teacher's Observational Checklist of "Engaged" and "Respectful" Student Behaviors

In observing your students as they perform classroom activities, how would you rate their general abiities to remain engaged and enthusiastic about their learning tasks?

Do Your Students Regularly:	Yes	No	Not Sure
1. Hand in work that you would consider to be of maximum quality?			
2. Take the initiative to re-do assignments when they receive a low grade?			
3. Perform better when a reward like a coupon or a grade is promised?			
4. Need occasional threats of lowered grades in order to complete assigned tasks.			
5. Often bring in extra information from home when **not asked** to do so?			
6. Seek information **beyond** that given in the textbook when **not asked** to do so?			
7. Take the initiative to generate and pursue answers to **their own** questions about your subject area?			
8. Hand assignments in on time -- **without** the promise of a reward?			

Do Your Students Regularly:	Yes	No	Not Sure
9. Do the minimum just to get by?			
10. Want to know if an assignment will be graded before they do it?			
11. Hand in sloppy work -- or no work at all?			
12. Act disruptive when your back is turned?			
13. Work for rewards -- not for knowledge gained?			
14. Quarrel with or make fun of each other?			
15. Show disrespect toward you?			
16. Use profanity?			

Template: Teacher's Observational Checklist of "Engaged" and "Respectful" Student Behaviors

In observing your students as they perform classroom activities, how would you rate their general abiities to remain engaged and enthusiastic about their learning tasks?

Do Your Students Regularly:	Yes	No	Not Sure
1. Hand in work that you would consider to be of maximum quality?	X		
2. Take the initiative to re-do assignments when they receive a low grade?	X		
3. Perform better when a reward like a coupon or a grade is promised?		X	
4. Need occasional threats of lowered grades in order to complete assigned tasks.		X	
5. Often bring in extra information from home when **not asked** to do so?	X		
6. Seek information **beyond** that given in the textbook when **not asked** to do so?	X		
7. Take the initiative to generate and pursue answers to **their own** questions about your subject area?	X		
8. Hand assignments in on time -- **without** the promise of a reward?	X		

Do Your Students Regularly:	Yes	No	Not Sure
9. Do the minimum just to get by?		X	
10. Want to know if an assignment will be graded before they do it?		X	
11. Hand in sloppy work -- or no work at all?		X	
12. Act disruptive when your back is turned?		X	
13. Show disrespect toward their peers?		X	
14. Quarrel with or make fun of each other?		X	
15. Show disrespect toward you?		X	
16. Use profanity?		X	

APPENDIX E

TEACHER RESPONSE MATRIX FOR "ENGAGED" AND "RESPECTFUL" STUDENT BEHAVIORS

Appendix E

Teacher Response Matrix For "Engaged" and "Respectful" Behaviors

Teacher	Engaged Behav. Before	Engaged Behav. After	Total Gain Engaged Behav.	Respect-ful Before	Respect-ful After	Total Gain Respect-Ful

APPENDIX F

STUDENT QUESTIONNAIRE (WITH TEMPLATE)

Appendix F

Student Questionnaire

Directions: For each question below, put a check in the column that applies to you.

	Agree	Dis-Agree	No Opinion
1. I feel I can do many things to make a positive difference in the world.			
2. I regularly discuss, with my parents, what I am learning in school.			
3. What I learn at school has nothing to do with the way I live my life at home.			
4. Even when I don't have homework, I like to find information outside of school related to what I am learning in class.			
5. I enjoy sharing my ideas with others when I am in school.			
6. I feel that school is mostly a waste of my time.			
7. I feel happy when I am learning new things at school.			
8. I often learn new and interesting things in school.			
9. Schoolwork is not worth doing unless I get a grade for what I do.			

	Agree	Dis-Agree	No Opinion
10. Learning is enjoyable because I can use my imagination.			
11. Learning makes me feel good.			
12. I usually stop trying when something is hard for me to learn.			
13. I feel that school is exciting.			
14. The more I learn, the more new questions I have that I want to explore.			
15. School is boring for me.			
16. I feel that school is a place where I can accomplish many things.			
17. Doing schoolwork gives me good feelings about myself.			
18. My work in this class has little to do with the world outside of school.			
19. I am proud of the work I do in school.			
20. I like to read books, even when they are not assigned.			
21. In the end, grades are more important than what I have learned in school.			

Template: Student Questionnaire

Directions: For each question below, put a check in the column that applies to you.

	Agree	Dis-Agree	No Opinion
1. I feel I can do many things to make a positive difference in the world.	X		
2. I regularly discuss, with my parents, what I am learning in school.	X		
3. What I learn at school has nothing to do with the way I live my life at home.		X	
4. Even when I don't have homework, I like to find information outside of school related to what I am learning in class.	X		
5. I enjoy sharing my ideas with others when I am in school.	X		
6. I feel that school is mostly a waste of my time.		X	
7. I feel happy when I am learning new things at school.	X		
8. I often learn new and interesting things in school.	X		
9. Schoolwork is not worth doing unless I get a grade for what I do.		X	

	Agree	Dis-Agree	No Opinion
10. Learning is enjoyable because I can use my imagination.	X		
11. Learning makes me feel good.	X		
12. I usually stop trying when something is hard for me to learn.		X	
13. I feel that school is exciting.	X		
14. The more I learn, the more new questions I have that I want to explore.	X		
15. School is boring for me.		X	
16. I feel that school is a place where I can accomplish many things.	X		
17. Doing schoolwork gives me good feelings about myself.	X		
18. My work in this class has little to do with the world outside of school.		X	
19. I am proud of the work I do in school.	X		
20. I like to read books, even when they are not assigned.	X		
21. In the end, grades are more important than what I have learned in school.		X	

APPENDIX G

FLIER INVITING TEACHERS TO PARTICIPATE IN THE PRACTICUM

Just Because Students Do Their Work Doesn't Mean That They Like Doing Their Assignments . . .

When You Run Out Of External "Carrots" To Hold Over Your Students' Heads, Then What???

CALL FOR TEACHERS INTERESTED IN BEING PART OF A GROUP OF

TEACHER RESEARCHERS MAKING A DIFFERENCE

PURPOSE: To replace extrnisic motivators with intrinsic motivators in order to eliminate apathy toward academics

PRIMARY COMPONENTS:

1) Backwards Curriculum Design* -- rearrange the curriculum into themes and open-ended questions for student explorations -- and still cover most MBS skills.

2) Group Investigation -- student curiosities drive their desire to learn & generative learning allows the teacher to structure student curiosities.

3) Social Action -- fosters empowerment and teaches life skills*.

4) Multisensory Skill Teaching -- skill lessons that connect with the child's senses and feelings.

5) Sustaining A Momentum Of Joy -- achieved through 1-4 above.

WHAT'S INVOLVED:
Some Summer Time --
Two Workshops (12 inservice pts.)
Two Mini-Workshops (4 inservice pts.)
Collegial Conversations/Coaching* (Fall)

***Meets School-Wide Goals Related To Peer Coaching, Interdisciplinary Units, & Life Skills**

OPTIONS:
Stipends for Workshops (money permitting)
Publishing Opportunities

YES, I AM INTERESTED -- PLEASE GIVE ME DETAILS (When, Where, Etc.)

Name _____ **Home Phone #** _____

Please Place in Madeleine Friedman's Mailbox By June 10th

APPENDIX H

HANDOUT: EXPERIENCING JOY IN THE CLASSROOM

Appendix H

Handout: Experiencing Joy in the Classroom

EXPERIENCING JOY IN THE CLASSROOM*

Workshop Presented to:
TEACHERS AS RESEARCHERS MAKING A DIFFERENCE
Striving to Replace Extrinsic Motivators With Intrinsic Motivators In Order to Eliminate Apathy Toward Academics

*This handout was created with information obtained from Marie Bodemuller's January, 1990 Presentation at the Winter Symposium of the Coalition of Essential Schools, Fort Lauderdale, FL, updated to reflect the goals and objectives of the Teachers as Resesarchers Pilot Project, 1992-1993. Additional information was subsequently gained in the course of an interview with Ms. Bodemuller, conducted by the writer in June, 1992.

INTRODUCTION

There are many ways to infuse joy into the learning experiences of children. This workshop offers you one form -- an experiential glimpse of what it feels like to connect "curriculum" to real purposes, concerns, and emotions -- that lifts subject matter out of the pedantic and into the realm of the inner nature of both the children and the teacher.

Several "solution" elements are intertwined in this one activity, most notably *challenge**, *control**, and *heart*. Through the enhancement of some classroom experiences, *curiosity** and the *senses* also come into play.

Although the focus of today's experience is an outgrowth of a blend of earth science and world cultures (in the form of ecological anthropology), the interdisciplinary nature of this activity offers fertile ground for expansion into other content areas, simply by shifting the emphasis toward alternate sets of skills and by adding selected facts to the knowledge base. Thus, teachers in all content areas wishing to create and implement lessons such as these are able to construct personalized lenses through which to view the assignments and the outcomes.

**Challenge, Control,* and *Curiosity* are recognized intrinsic motivators detailed by M. R. Lepper and M. Hodell (1989) in "Intrinsic Motivation in the Classroom," a chapter appearing in a volume edited by C. Ames and R. Ames entitled Research on Motivation in Education, volume 3, pp. 73-105, published by Academic Press, San Diego, CA.

PHILOSOPHY

As students learn to function in the age of information, it is important for them to understand how deeply one subject area intertwines with all aspects of their daily lives. This creates a living curriculum, and "grabs" the learner in an intrinsic sense.

This mini-unit is offered with the underlying belief that all students can use their minds and their hearts in the process of learning. Getting the facts is just the beginning, a means -- not an end by itself. Internalization of knowledge and a feeling for what has been learned are paramount, parallel objectives. On the other hand, the regurgitation of predigested facts is noticeably absent. This internalization is overtly measured by how well the students can make use of the information gathered, rather than by how much information can be repeated upon demand. Intrinsic student gains are also measured by the wonder and the desire to learn that lives on, long after the formal unit has ended. Internalization thus becomes a new paradigm, a new way of seeing the end goals of the teacher's instructional efforts.

GOALS AND OBJECTIVES

The ultimate goals and objectives of this segment, as well as the total program, are as follows:

- To relate any discipline to a multitude of other disciplines;
- To provide an intellectually-challenging curriculum;
- To instill enthusiasm for learning into all students;
- To provide a living curriculum;
- To empower teachers and students by building flexibility within the structure of course guidelines;
- To incorporate shared decision-making processes into the operation of the program;
- To incorporate student and teacher utilization of technology into all phases of program delivery;
- To make textbooks resources that support the curriculum instead of driving it;
- To provide for public exhibition of mastery;
- To foster attitudes of decency and respect as students function as a community of learners;
- To honor diverse learning and thinking styles by recognizing the need to blend artistic and creative elements into the learning process;
- To personalize instruction and expectations to fit the needs of each individual learner;
- To make the student the worker and the teacher the coach;
- To promote lifelong learning and sharing of knowledge; and
- To promote joy in the learning process.

UNIQUE FEATURES

Student research and delivery is multi-technological. During research, students utilize resources that include computer databases, videos, audiotapes, and telephone interviews. The delivery of a group report requires the use of the microphone, supplemented by the overhead, student-made videotpes, slides, films ordered through the media center, and student-generated posters.

An alternate means of assessment replaces the traditional paper-and-pencil measurement. At the close of each unit, student research groups are required to present their findings to their peers in a public exhibition that addresses the visual, auditory, and kinesthetic learners in the audience. Presenters are responsible for keeping the listeners' attention and for inventing ways of assuring active audience involvement in the presentation. Assessment addresses both the content of the presentation and the processes of communication. It also encompasses the gathering, sorting, applying, and evaluating of information used in the group report.

The lesson integrates many disciplines and is able to facilitate a better lifestyle through meaningful projects that address real-world problems.

COMMUNITY INVOLVEMENT AND SOCIAL RESPONSIBILITY

Active implementation of this lesson segment, as well as the total program, involves community resources not only in the acquisition of information, but also in the exhibition of results. First, resources within the community (e.g., libraries, local agencies) are tapped for information. Second, guest speakers are invited to share their knowledge and expertise on topics related to areas under exploration. Field trips can be planned to augment the students' access to primary sources in certain forms of information-gathering; the setting up of interviews is another way in which students reach beyond the walls of their classroom and their school to gather data.

Students may write letters to a variety of agencies in their quests for information, extending community involvement beyond local boundaries. The children are also encouraged to write letters to the editors of magazines and newspapers in order to express feelings heightened during their studies.

PARENTS AS COLLABORATORS play an active role in the stuents' quests for information. The parents provide transportation as students travel to libraries, agencies, and to each others' homes to conduct their research assignments. Parents are welcome to attend their childrens' exhibitions; they are also sought as aides when students conduct their resesarch in the school's media center.

Active community involvement extends to the students' role as information-sharers. Extra credit can be earned by those students choosing to act on presenting their exhibitions beyond the walls of the immediate classroom. Students may appear as guest speakers in other classrooms, schools, or in community organizations. Some call senators and congressional representatives. Some distribute petitions or join in community projects directly related to the focus of their research. Sharing options are limited only by the students' imaginations.

APPENDIX I

HANDOUT: THE PROCESS OF BACKWARDS CURRICULUM DESIGN

Appendix I

The Process of Backwards Curriculum Design

Planning Learning Experiences So That The Whole Is Greater Than The Sum Of Its Parts!

Workshop Presented to:
TEACHERS AS RESEARCHERS MAKING A DIFFERENCE
Striving to Replace Extrinsic Motivators With Intrinsic Motivators In Order to Eliminate Apathy Toward Academics

Introduction

- **What if . . .** the purposes of curriculum development and implementation could be lifted beyond the ordinary and expected?

- **What if . . .** units and activities could be designed with a greater purpose -- one that honored and included more traditional outcomes, and yet provided something more?

- **What if . . .** learning experiences could develop, in the children, feelings of accomplishment and fulfillment -- feelings born of visions created and acted upon, of connections from the subject matter to the inner nature of the learner?

Then the lessons might not be one solely of content, or of thoughtfulness, or even process -- but of

JOY!

The Process of Backwards Curriculum Design: Ten Easy Steps

1. **Brainstorm Significant, Broad Topics:**

   Brainstorm significant, broad content topics, listing them in an interdisciplinary fashion. THE ULTIMATE OBJECTIVE OF THIS STEP IS TO GAIN AN OVERVIEW OF THE "BIG PICTURE" OF CONTENT AND SKILLS TO BE CONSIDERED AS THE FOCUS OF THE UNIT (OR CLUSTER OF LESSONS). Use textbooks, State Frameworks, Scope and Sequence charts.

2. **Categorize and Recategorize Until General Themes Begin To Emerge:**

   A. Look at the brainstormed topics. Ask the question, "WHAT GOES WITH WHAT?" as you combine related topics and/or skills across the disciplines, using interdisciplinary category titles for each list of related items. The brainstormed items can be combined and re-combined any number of times, in many different ways.

   B. Again, ask "WHAT GOES WITH WHAT?" and combine titled lists, adding a more inclusive title at the top of each new combination of combinations. Keep going, until a few Broad Themes emerge.

   C. Choose one Broad Theme for this unit.

3. **Identify Key Concepts/Areas of Concern:**

   The object is to "see" the sub-concepts of the area of study in an interdisciplinary light. You do this by referring back to the list of combinations and sub-combinations under your Broad Theme. A **mind map** (Margulies, 1991) can help you conceptualize this interdisciplinary cluster of key concepts/topics in a visual manner.

4. **Design One or More Essential Questions:**

   These are the questions the students will need to answer at the end of the unit or the cluster of lessons. According to Grant Wiggins (1987), Essential Questions are open-ended and allow for a variety of responses, backed by research done by the students. Such questions go well beyond the simple rephrasing of someone else's ideas, thereby ensuring that the students are using higher-order thinking processes.

5. **Develop an ACTION/APPLICATION QUESTION:**

   This is a special type of question with the following criterion: it must address A CURRENT REAL-WORLD PROBLEM OR SITUATION. Two types of action questions can be formed.

   • **The Social Action Question** -- must have the potential to facilitate a better lifestyle here and now. It takes on a problem/solution format and answers two questions: What has been done to address this

problem so far? What can we do, individually and collectively, to solve the problem? Original but "realistic" solutions are encouraged. The students, upon oral questioning by their peers and their teacher, must be able to defend the feasability of their solutions based upon research.

• **The Real-Life Application Question** – must ask students to connect the content learned in an active format. Merely saying how the content is related to real life is not enough; students must demonstrate their ability to actively apply what they have learned outside the context of classroom life.

6. **Design the Final Exhibition of Student Mastery:**

How will students present their answers to the Essential Question(s)? How will they demonstrate their fulfillment of the Action/Application question? Some suggestions for Exhibition components include:

• A written report, complete with an assortment of references, that contains facts AND addresses **all** questions (e.g., student-generated, teacher-generated, Essential, and Action/Application).

• The inclusion of multi-technological references (e.g., films, filmstrips, videodiscs, videotapes, television specials, etc.);

• An oral (group) report that conveys the information within the written report and that contains elements that honor diverse learning styles (e.g., transparency diagrams, pictures, models, hands-on items, music, video excerpts, computer excerpts, etc.);

• A "purpose for listening actively" – <1> selected notes that are given on transparency for the rest of the class to write down, and <2> a student-made game of questions based upon the information conveyed in the oral report (includes some little "rewards" for the winning team when the game is played);

• The opportunity (and encouragement) for students to put their solutions / proposals into action – beyond the classroom walls (i.e. petition assignment, presenting the report to another class in another school, etc.); and

• Seminars where the various answers to the Essential Questions are examined, discussed, and probed by all students in an open exchange of ideas.

7. **Work Backwards To Develop The Unit:**

With the Essential and Action/Application questions in mind, and in light of the expected Exhibition of Student Mastery, WHAT DO THE STUDENTS NEED TO KNOW TO BE ABLE TO ACCOMPLISH THE TASK?

• What knowledge base is needed (from the textbook and beyond)?

• What process skills (research, computation, writing applications, problem-solving skills, thinking skills, etc.) are essential?

• What state and county skills are being addressed?

• What skills may be needed, that may not be addressed by state or local guidelines?

• Should some facts and skills be used as jumping-off points?

• Which information is best provided at a later point in the course of study?

• Which abilities are more "spiral" in nature, subject to ongoing improvement with practice over time?

• Which skills are best presented in a linear format?

8. **Plan Instructional Strategies:**

What instructional strategies will lead students toward the thoughtful mastery of facts, skills, and concepts -- and away from thoughtless, inert retention? Whatever strategies are chosen should address intrinsic ways in which students can relate to the content under study; there is no prescription for "the one best method," however.

9. **Storyboard Your Lesson Sequence:**

Use a "story board" matrix of teachers and subjects to map the general flow of day-to-day activities for all teachers to see. Color-coding the lessons taught by each teacher might come in handy, since interesting combinations of content or time blocks may emerge.

10. **Decide on Specific Lesson Plans:**

Detailed lesson plans can be developed, as needed, in a timely manner. Be prepared for revisions along the way, when certain lesson components take less or more time than originally expected. It is best to be observant and flexible.

• The above process is an adapted synthesis of the following references:

Bodemuller, P. M., & Friedman, M. S. (1988) A workbook: Team bonding and the creation of an interdisciplinary curriculum through the development of essential questions. Unpublished curriculum design workbook.

Bodemuller, P. M., Friedman, M. S., & Kimmich, E. (1989, January). Interdisciplinary planning: How can we arrive? Curriculum design workbook presented at the Winter Symposium of the Coalition of Essential Schools, Fort Lauderdale, FL.

Friedman, M. S. (1990). Curriculum theory and instructional design models: The quest to build a "better mousetrap." Unpublished Manuscript, Nova University, Center for the Advancement of Education, Fort Lauderdale.

Wiggins, G. (1987, Summer). Student as wotker: A textbook for the essential school. Providence, RI: The Coalition of Essential Schools.

• The concept of mind-mapping is detailed in:

Margulies, N. (1991). Mapping inner space. Tucson, AZ: Zephyr.

The Process of Backwards Curriculum Design: Ten Easy Steps

1. **Brainstorm Significant, Broad Topics.**
2. **Categorize and Recategorize Until General Themes Begin To Emerge.**
3. **Identify Key Concepts/Areas of Concern.**
4. **Design One or More Essential Questions.**
5. **Develop an ACTION/APPLICATION QUESTION.**
6. **Design the Final Exhibition of Student Mastery.**
7. **Work Backwards To Develop The Unit.**
8. **Plan Instructional Strategies.**
9. **Storyboard Your Lesson Sequence.**
10. **Decide on Specific Lesson Plans.**

APPENDIX J

HANDOUT: INTRINSIC STRATEGIES FROM WALDORF EDUCATION

Appendix J

Handout: Intrinsic Strategies From Waldorf Education

INTRINSIC STRATEGIES FROM WALDORF EDUCATION

These strategies are a compilation of the writer's notes, taken during her attendance at The Art of Teaching Grades 6, 7, and 8, a course in Waldorf education offered by the Rudolf Steiner College in Fair Oaks, California from July 26-August 1, 1992. Primary instructors were Eugene Schwartz and Roberto Trostli.

Workshop Presented To:
TEACHERS AS RESEARCHERS MAKING A DIFFERENCE
Striving to Replace Extrinsic Motivators With Intrinsic Motivators in Order to Eliminate Apathy Toward Academics

14 QUICK FIRECRACKER TIPS FOR TEACHERS: MAKING INTRINSIC CONNECTIONS IN YOUR LESSONS

- Try to **do something artistic** each day -- even if it is just an artistic title.
- **Calligraphy** revitalizes the handwriting.
- Schedule **debates** based upon what has been learned ("Should _____ be _____?). Students argue with facts; assign a short position paper at the end.
- Combine **inquiry and social action** related to a topic under study. Link with a problem of concern to the students in real life.
- Stimulate students visually with notes done in **colored chalk**; also create artistically drawn illustrations (copied from books).
- Have grammar bees, math bees, history bees, etc.
- In **any subject**, focus on historic and heroic characters (e.g., Pythagoras in mathematics); talk about the person's life. Human stories humanize the subject matter; adolescents love biographies, especially about heroes and heroines.
- In any subject, use cooperative problem-solving.
- In **science** -- appeal to feelings first (wonder and awe, curiosity, interest) in a demonstration of scientific phenomena that leaves students wondering and craving more information.
- In **language arts**: assign polarized compositions (e.g., "The Steam Engine: Foundation of Laziness/Beneficial Invention).
- In **mathematics**, bring out the aesthetic beauty of mathematical patterns in nature; also show the beauty of number patterns.

- **Review a semester's work around a general theme;** the review can then be connected in an interdisciplinary manner, where the different subjects enhance each other and make more sense because they are interrelated.

- Better yet -- Start the semester's work around a theme --> carry that theme through --> and review thematically at the end (Let each teacher in your sub-group **review an interdisciplinary concept** rather than a subject. Exams can be disciplinary or interdisciplinary!)

- In **any subject area,** scaffold the modeling of how to write expository lesson summaries in any subject area. FIRST TIME: do one for the students to copy. SECOND TIME: Write the first and last paragraphs; let students make up the middle. THIRD TIME: just provide the introduction. AFTER THAT: students can do their own.

MAKING INTRINSIC CONNECTIONS IN SPECIFIC CONTENT AREAS

ALGEBRA
(From Whole to Part)

- Illustrate your first introduction of each topic in a practical problem/solution story that needs a formula such as the one being presented.

- Make sure people are in the story, and that the problem represents events in real life. Have students re-tell the story in their notebooks and illustrate the problem/solution with pictures. Let them add the formula and illustrate mathematically how the problem was solved.

- Now let students see the formula again in its letter form. Allow students to plug in numbers for the letters in the formula. Thus, students see many distinct possibilities for the formula as a whole. This is how to move from whole to part in algebra.

ASTRONOMY

- Start with the wonder of the stars, as might be illustrated in a picture of a person gazing in awe at the heavens above on a starry night.

- Then present a poem that awakens a sense of wonder about the stars; reach out beyond the five conventional senses.

- Trust the phenomena themselves before falling back on books.

- Look at astronomy as a geography of the stars.

CHEMISTRY

- Always link chemistry studies with real world applications before going into detail.
- Connect chemical processes to their industrial applications.
- Add the history of a process in order to give it context and depth (i.e. in studying combustion, present the history of fire and how humankind has used it in the past. Tell the story of Prometheus; include anthropology, sociology, and culture in your presentation. Have students illustrate this history in their notes.
- To demonstrate chemical phenomena, use home substances whenever possible (cabbage juice, common containers, etc.).
- Include moral implications (i.e. pollution from industrial processes); the children must learn to have a moral relationship to matter, so that they can learn to serve the earth in a moral way.
- Students need to do things, or they will become bored and you will lose them.

GEOGRAPHY

- Geography fosters brotherhood and feelings of diversity (multiculturalism).
- Geography fosters appreciation of diversities.
- Teachers should build up a personal connection/knowlege of the flora and fauna of the local geography -- to inject the subject with life.
- Teach geography to show students how to take care of the earth.
- Pick a geographical feature (i.e. metal deposits, rivers, plants, grains) and approach geography from this focal point: how the characteristics of this feature change according to different land and climate conditions; how rivers affect civilizations; where grains are grown; where metals are found and how this influences different economies . . .
- Enliven geography with folk tales, the art and music of different places -- give students a *feeling* for the rhythms and the soul of a people -- *immerse* students in these feelings to stimulate wonder, awe, interest, and (therefore) an inner connection with what they are studying.

GEOMETRY

- Work from whole to part; when you analyze something, you can take it apart in many different ways.
- Start with geometric constructions (string or paper), or patterns in nature, or tesselations --> then isolate the patterns --> then look at the proofs and postulates and theorems that support the formations.
- Relate geometric forms to human body structures.
- Add art through shaded geometric constructions, done with care and rigor; students can also create their own string art constructions or their own tesselations.
- Strive to give students a *feeling* of space.
- Make proofs physical, so students can experience them. Have students align corresponding angles using construction paper. Have students cut off the interior angles of a triangle and fit them on a straight line. Use cut squares and angles to demonstrate the Pythagorean theorem, or physically cut up a circle into 8 equal wedges in order demonstrate Π or $2\Pi r$.
- If geometry cannot live and sing inside the children, it should not be taught.
- To add music, the children can make up and sing songs about geometric rules; as they sing the songs, they can demonstrate the proofs with the manipulatives they have constructed.

HEALTH AND PHYSIOLOGY

- Health and physiology can be unified under the theme of "Rhythms Living In Our Lives."
- Stimulate excitement and involvement by having debates on the values of various foods.
- To develop a sense of wonder: compare how different animals with different heart closures behave differently.

- Study muscles and compare "working out" to "just plain working" of our muscles.
- Look at the term "energy crisis" from a muscular perspective.
- For a test, ask each student to draw himself or herself as a skeleton doing his or her favorite activity.
- Relate geometric forms to human body structures.

HISTORY

- Teach history through biographies -- to make history connect with events that happened to living people; go into the character flaws or superior traits that made these figures so important in their own time.
- Add short plays or skits about key figures and their involvement in the events of their time and add even more of a human quality to the content; plays based upon historical times or incidents give life to mere dates and places.
- Portray history through works of art -- how those works inbued the *feeling* of the age.
- Juxtapose forces in history and trace their parallel development (e.g., morality and idealism vs. the profit motive in U. S. history).
- Connect historical periods with life today (heavy metal rock groups / Norse warriors; Egyptians / cosmetics).

LANGUAGE ARTS

- The history of a word illuminates its meaning in greater ways, making language more meaningful.

- Take spelling words from a list of words most misspelled by the students; or take one root and do 20 spelling words from that root.

- Teach vocabulary in context. Take vocabulary from the students' interdisciplinary units or from their readings. BEFORE LOOKING UP WORDS IN THE DICTIONARY, have students define the word based upon its context in use; THEN go to the dictionary and have students choose the definition that best matches the context.

- Study grammar rigorously, but IN CONTEXT with the students' writing activities; parts of speech can be color-coded, or even given characteristics of personality (e.g., verbs are lively).

- Exemplify good writing and let students learn by example. You write a passage based upon the content in a lesson students studied in this class or in science, social studies, business, math, or any other subject. Have students copy this into their notes as a summary of what they did. In this way, students learn to emulate a more advanced style of writing. You can also make sure you emphasize the use specific grammatical terms (like adjectives or appositives) so that the passage can be used later for more detailed study. (When the students copy notes in this manner first, they are starting with the **whole** context of a grammatical concept -- in use; then the teacher can move to the focused **part** of speech.)

- When teaching writing, the teacher should also do some writing, "invoking the muses" and listening to his or her personal world of inspiration. Teach by example; write poems, stories, or even short plays for the children.

- Have a literary gift exchange where the teacher and the students exchange gifts of writing to each other.

MATHEMATICS

- The question constantly before teachers of mathematics is: "How can I make mathematics come alive?" If the subject matter cannot be imbued with life, it should not be taught. Nothing dead should be taught.

- Always start with the concrete. Begin with experience -- either yours, or someone else's-- in a story. The human experience "humanizes" mathematics and breathes life into numbers.

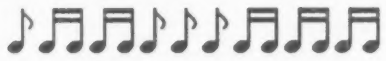
- Present the beauty inherent in mathematics -- visually or poetically. Do this often enough to create and sustain a momentum of aesthetic appreciation for the subject matter.

- Math develops one's *feeling* life -- show it with fibonacci patterns, golden rectangles, etc.

- When students do number problems, make sure that the problems are related to real life experiences and are not contrived. Have students write out selected number problems, and ask them to include an illustration of humans engaged in the problem's described activity. Have students also include the detailed numeric processes they used to find the answer (have them show their work).

PHYSICS

- Physics is BEAUTIFUL!
- Start by linking physics to music (e.g., use the piano and how it is structured and how it works; you can cover most aspects of the study of sound in this way.
- To inspire wonder, demonstrate a phenomenon -- but do NOT explain why the phenomenon is occurring. Then ask the students for their explanations. Take all ideas in for speculation before giving the actual explantion.
- After studying a phenomenon, ask how that phenomenon relates to phenomena in the human body, or other animal bodies, or to industrially-produced products.
- Students need to see the way the physical laws relate to all the details of life.
- Find simple activities that allow students to experience sound waves.
- Devise activities that enable students to experience inclined planes in real life.
- Use simple home equipment so students can go home and do the experiments for their parents -- and so that students can see that science is related to life.



ARTFUL NOTEBOOK IDEAS FOR MANY SUBJECTS

ART
- Include poetry, mentioning color, sculpture, paintings, etc. (either copied from anthologies or created by the children). Include illustrations related to the poems, too.

ASTRONOMY
- Include poetry and illustrations mentioning stars, planets, etc.

BOTANY
- Include diagrams of plants, and enhance the topic with poetry, too.

GEOMETRY
- Include geometric figures brightly colored and shaded, using colored pencils.

HISTORY
- Periods in history can be colorfully described -- both in words (with plenty of adjectives, metaphors, etc.) and in pictures (colored pencils work nicely here).

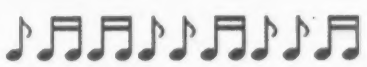
LANGUAGE
- Story and poem illustrations can be included; calligraphy also enhances student writings. In addition, ornate first letters of paragraphs give a special touch to longer prose passages.

MATHEMATICS
- Students can illustrate the selected problems they have worked out (with human figures carrying out the tasks described in the problems).

MINERALOGY
- Include wonderful pictures of quartz crystals, shells of calcium, etc. The children can copy these from models you draw (reference books can help).

PHYSICS

- For the study of sound, include pictures of musical instruments whose sounds have been studied; picture graphs can illustrate the number of decibels of various sounds.



- Math problems of all sorts can include pictures of people applying formulas to real-life tasks.

PHYSIOLOGY

- Facts can be framed in descriptive prose using pictures in words and in drawings.

INTERDISCIPLINARY BLENDS

- Blend GRAMMAR and ENGLISH with application to HISTORY (reading stories; conducting research; writing compositions, stories, poems).
- Make DRAWING the major point of entry into GEOMETRY.
- BUSINESS and MATH combine in the study of percentages and in profit-making simulations.
- ECONOMICS and PHYSICAL GEOGRAPHY combine in a study of a country, its resources, its ecology, and its problems.
- GEOMETRY and PHYSICS are great entry points for WRITING, as students describe what they did, and what they learned in story form.
- A journal in LANGUAGE ARTS can tell, in story form, what was done in SCIENCE class. ART can be used to illustrate, with pictures, the descriptions of work done in science class. (The science teacher can grade for content accuracy; the language arts teacher can grade for mechanics and expression.)
- ART can blend with SCIENCE when students illustrate a flower artfully and then label the parts.
- ART blends with GEOGRAPHY in the careful making of colorful maps.
- READING can correspond with the THEMES under study; so can plays. This maintains continuity and context and linkages between the subjects under study.

PORTFOLIO IDEAS

1. Have students write expository accounts that summarize a lesson in any subject area. Ask students to carefully illustrate these accounts after the summaries have been roughly written and edited.

2. Suggestions for written accounts of lessons:
   - expository accounts
   - charts
   - poems
   - stories
   - essays of opinion (backed by facts)

   (Try, whenever possible, to avoid step-by-step recipes or formal lab reports because these tend to fragment the feeling of wholeness gained from the lesson.)

3. Include ARTISTIC WORK with each portfolio piece (one or more of the following):
   - decorated title
   - illustrated border
   - decorated initial capitals for each paragraph
   - diagrams (and annotated diagrams)
   - illustrations and pictures

4. "LESS IS MORE" -- each portfolio piece should represent the student's best efforts, carfully and artistically done. So . . . do not overload students with too much portfolio work; an interdisciplinary sub-group portfolio, regulated by sub-group teachers, can keep this work at a reasonable level.

5. For any topic or unit, start with the whole (a related poem or a beautiful description of the topic to be studied, followed by annotated diagrams, followed by specifically-labeled segments. (Get more specific as you go along -- both in your lessons and in your portfolio segments.)

6. Maintain rigorous standards for porfolio entries; each entry is a final exhibition of what the child has been learning at a specific point in time.

7. If entries are not done correctly or neatly, do not let yourself or the student settle for an "F" -- have students re-do; assign the higher grade (this makes it worth the student's while to re-do, and the others were already rewarded because they did not have extra work to do).

8. Use part of the portfolio as the culmination of a textbook made by each child -- a synthesis of the child's learning -- beautifully written and illustrated by the child throughout the year as a record of his or her own work.

9. Have 2 books: a rough copy book and a final "portfolio book" to be handed in.

10. Students may not be able to go on the class trip unless their portfolio work is completed.

11. BUT: Do not kill the joy of learning by being too fussy and pedantic; be flexible.

SUGGESTIONS FOR PARENT PARTNERSHIPS

**PARENT COMMUNICATION IS ESSENTIAL IN ORDER TO GAIN AND MAINTAIN CONFIDENCE IN THE TEACHER AND SUPPORT OF THE SCHOOL'S ACADEMIC PROGRAM.*

PARENT EVENINGS

- Begin the school year with a workshop that gives parents some information about child development at this age.
- Give a mini-lesson to enable parents to experience what the children are going to learn ("this is the poem we will do . . . this is what your child will experience in mathematics . . .")
- Repeat evenings with mini-lessons during the year.
- Include not only hard facts, but also artistic elements in your presentations.
- If you are doing any innovative curricula, draw a general "curriculum map" for the parents so that they know what you are doing and why, thus providing a rationale for your chosen innovation. (But make the map broad, so you don't get boxed into a corner as your own skills evolve or as real-world events present "teachable moments.")

INTERACTIVE HOMEWORK

- Give students an assignment to go home and show/tell their parents what they have learned. Then the parents have to write a report about what the child did and said! Include guiding questions for the parents to help frame their responses (e.g., What key points did your child bring out? How did your child illustrate the concept?)
- Have parents proofread their children's portfolio contributions and sign them before the contributions are handed in.

CLASS OR SUB-GROUP FAIRS

- Invite parents and have a student (or several) re-demonstrate a science experiment, re-tell (or enact) a story from history, display (and explain) aesthetic mathematic constructions, etc.

APPENDIX K

PARTICIPANTS' "BAG OF TRICKS" FOR INTRINSIC AND REAL-LIFE TEACHING STRATEGIES

Appendix K

Participants' "Bag of Tricks" For Intrinsic and Real-Life Teaching Strategies

The following strategies have been amassed (so far) for our intrinsic "Bag of Tricks":

1. Dance (e.g., square dancing/language arts)
2. Creativity
3. Puppetry
4. Fantasy
5. Movement/Rhythm
6. Music
7. Art (e.g., beads)
8. Celebrations/Festivals
9. Drama/Plays/Talent Shows/Role-Playing
10. Students' Presentations
11. Ownership
12. Cooking/Foods
13. Appeal to Multiple Senses
14. Parent/Family Inclusion
15. Personal Recognition/Imbedded Self Esteem
16. Raps/Poetry/Songs
    (Create and re-create and/or repurpose)
17. Inventions

We also generated the following activities related to real-world content applications (so far):

1. Simulations and beyond: Simulate the running of a business -- or actually start a mini-business and run it (can be an investment firm, a company that develops a product to sell, etc.). Capital can be raised either by having students perform chores for $1.00 a task, or by seeking assistance from a partner in excellence.

2. A study of the U.S. Constitution by having students evaluate their own "students' rights" in relation to the provisions in the Constitution. (Evaluation is the top of Bloom's taxonomy -- need we say more?)

APPENDIX L

CLOSING INTERVIEW FORM

Appendix L

Closing Interview Form

CLOSE-OUT INTERVIEW: TEACHERS AS RESEARCHERS

1. HOW DID YOU FEEL & WHAT DID YOU GAIN FROM THIS "TEACHERS AS RESEARCHERS" EXPERIENCE?

PLUS	MINUS	INTERESTING*

2. SPECIFICALLY, HOW DO YOU FEEL THAT THIS EXPERIENCE AFFECTED YOUR STUDENTS IN TERMS OF THE PRESENCE OR ABSENCE OF APATHY TOWARD CLASSWORK?

3. TO WHAT EXTENT DO YOU FEEL THAT YOU:	Very Much	Some-what	A Little	Not At All
• Learned a variety of different, intrinsically-motivating classroom techniques?				
• Had an opportunity to apply the intrinsic strategies that you learned?				
• Involved students in active, "real-life" assignments?				
• Aimed for "mastery," even if some students took longer than your original time schedule?				
• Planned units that incorporated social responsibility into academic instruction?				

4. ADDITIONAL COMMENTS:

* The *Plus, Minus, and Interesting* (or PMI) is a thinking tool developed by Dr. Edward de Bono in 1986 for the CoRT Thinking program, published in New York City by Pergamon Press.

Please check off the intrinsic strategies that you have used/plan to use in your lessons as a result of this TEACHERS AS RESEARCHERS EXPERIENCE:

STRATEGY	HAVE USED	PLAN TO USE
1. Dance (e.g., square dancing/language arts)		
2. Creativity		
3. Puppetry		
4. Fantasy		
5. Movement/Rhythn		
6. Music		
7. Art		
8. Celebrations/Festivals		
9. Drama/Plays/Talent Shows/Role-Playing		
10. Students' Presentations		
11. Ownership		
12. Cooking/Foods		
13. Appeal to Multiple Senses		
14. Parent/Family Inclusion		
15. Raps/Poetry/Songs		
16. Inventions		
17. Petition Midterms/Petition Exhibitions		
18. Community Service Projects		
19. Fraction Quilts*		
20. "Box" Project*		
21. Three-Dimensional Models (e.g., pizza cell models)		
22. Student-Made Slide Presentations		
23. "Positive Revolution" Discipline Plan**		
24. Mathematics and Architecture (LEAP model)*		
25. Cooperative Group Investigation		
26. Student-Generated Questions as Focus of Unit		
27. Student Mastery NOT LIMITED BY TIME CONSTRAINTS		

* *Fraction Quilts*, the *"Box" Project*, and *Mathematics and Architecture* were strategies presented by Ila Gross, Consultant for LEAP (Learning through an Expanded Arts Program) in New York City.

** The *Positive Revolution* is a concept developed by Dr. Edward de Bono and explicated in his book, Handbook for a Positive Revolution, published in 1992 by Viking Press in New York City.